

An Exploration of Customer-Based Brand Equity in Industrial Markets

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A thesis submitted to
The University of Gloucestershire
in accordance with the requirements of the degree of a PhD
in Business and Management
in the Business School

August 2016

I. ABSTRACT

Although interest towards the business-to-business (B2B) brand and its equity has increased over the last ten years (Klarmann & Fleischmann, 2014), the elements that have been identified and the models that have been developed appear rather disconnected (Leek & Christodoulides, 2011). One possible reason is that the theory that has been developed is rarely rooted in the B2B context (Keränen, Piirainen, & Salminen, 2012). This leaves a high potential to uncover further elements, their interrelations and underlying patterns by exploration (Keränen et al., 2012). The accomplished multiple case study follows an embedded and a holistic approach (Yin, 2009) by studying the similarities and differences of the cases and the subunits. The four cases represent one larger organisation and three smaller organisations. Three of these organisations purchase standard goods and one organisation purchases highly customised components. Using an adapted critical incident technique, the author accomplished two semi-structured interviews with 18 participants. The elaborated framework and the developed model offer a dynamic view of customer-based brand equity, consider the multifaceted nature of the industrial B2B context and take the multi-headed nature of the buying centre into account. Moreover, the findings have uncovered the buying centre's general valued factors. The results show further that the characteristics of the assets vary depending on the business context and the business functions' range of tasks. The fulfilment of the business functions' task-based value factors appears to offer the possibility to address the self-image. Furthermore, I propose to determine customer-based brand equity by the three main comprehensive brand assets: the brand's knowledge, the capability and the attitude (see Figure 23). These assets and their detailed characteristics are valued throughout the business relationship (see Figure 24). A business relationship consists of a pre-contact, evaluation, clarification, survey, foreplay, delivery, proof of credit and a relationship phase. The influence on the brand's image appears to be particularly strong during the evaluation and clarification phases. The capability and knowledge factors are found to be most influential during the beginning of the relationship and the attitudinal factors during the later phases. The value of an intensive relationship appears to depend on the potential for joint-work optimisation, the contribution towards the customer's stated added value and the degree of interactivity. Moreover, the relationship begins with the perception—achieved through one-way communication—of the brand as a team. Only later does the business relationship become increasingly interactive and the perception develops towards a focus on the team members. Apart from the sales force, the engineers are found to be one of the most influential team members that contribute to the brand image.

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of this thesis has been submitted as part of any other academic award. This thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed _____ Date _____

II. ACKNOWLEDGEMENTS

First, I express my sincere thanks to my supervisors Dr. Paul Hopkinson and Dr. David Newton for their useful criticism and their valuable and fruitful comments. Further, I thank my friend and mentor Dr. Kap-Keun Song for encouraging me to constantly develop myself and expand my personal limits. I also thank my dear wife Milena Berger, who supported me during the whole project by providing me the necessary free time and inducing motivation during difficult times. A special thank you to my son Dylan Berger and my daughter Sophia Berger for their patience during this time.

I also extend my thanks to Dr. Philippa Ward and Prof. Barry Davies for their inspiring lectures in ontology and epistemology, which helped me develop a new perspective on science.

Finally, I thank my mother for her language support and my father whom I see as a role model for committing oneself to a chosen purpose.

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V. KEY TERMS

This thesis uses and refers to some key terms, which are defined in this section to ensure a common understanding.

Brand equity

This research project considers brand equity from a behavioural perspective and focuses on customer-based brand equity. See Section 2.1.4.

Brand association factors

These factors mainly refer to aspects in the form of adjectives, which characterise the perception of the brand.

Capabilities

This term refers to brand associations, which describe the ability of a brand to execute any kind of requirement (Vincent, 2008). The range of capabilities may include the general abilities of the setup organisation, the possibilities of the existing infrastructure, the available product portfolio, the distribution performance, the ability of understanding or can refer to the ability of precision of a particular product attribute.

Competence

The term competence refers to the perceived know-how and describes how well something is known (Vincent, 2008). The existence of competence does not directly indicate that one has the required capability (Vincent, 2008).

Buying centre (decision-making unit)

In the industrial business-to-business (B2B) context, the customer represents the buying centre and is defined as the decision-making unit. Different concepts categorise this group through different aspects; for example, by classifying the group as a decider, influencer, user, gatekeeper and buyer (Webster & Wind, 1972). Another concept perceives the consideration of the person themselves, the function and the role as the most sensible approach (Backhaus & Voeth, 2014). This research project categorises the buying centre according to the business function; the term buying centre is applied and defines the group of business functions that select a supplier.

Industrial B2B market

Through this term, the B2B market in which technical products, components, systems and investments are exchanged is defined. Furthermore, this research project has delimited the exploration towards complex industrial markets, meaning customer-supplier interactions in which the supplier has in some way added value by modifying at least the raw material.

Perception

The term perception is frequently used and represents a central term for this research project. Human perception is dependent on different factors. One factor is the mental state, which includes hopes, fears and expectations. Another factor is the cognitive state. Kosslyn et al. (1994), as cited by Dror (2005), describe the cognitive process as an interactive process that depends on the information that is already stored in memory. Moreover, the basic perceptual mechanisms are influenced by the perceiver and the mental imagery is a phenomenon that occurs without direct perceptual input and the perceptions are subjective in nature (Dror, 2005). Therefore, the generated image seems to be an individual process, which is influenced by both the previous experience and the recent interaction.

In this research project, the perceptions of individuals were gathered by verbal descriptions of their experiences. These descriptions were analysed and the central valued factors deduced. These value perceptions were subsequently discussed with the individual to ensure the identified perception corresponded with what the participant had in mind.

Supplier brand (distributor brand vs. manufacturer brand)

As in the business-to-consumer (B2C) segment, the industrial B2B customer buys through different channels, which lead to interaction with the manufacturer and/or distributor. The distributor will possibly add a certain added value to the basic product. This research project will not differentiate between the distributor and the manufacturer brand, given that the aim is to ascertain the customer's view of the valued factors of the supplying company. The supplying company can thus be a distributor or manufacturer, whereby the thesis uses the unifying term "supplier brand". It is acknowledged that the majority of the cases analysed in this thesis purchased directly from the manufacturer.

Touchpoints

Touchpoints represent occasions in which the buying centre perceives the supplier brand and offers the possibility to generate associations about the brand. The touchpoint is influenced by a source and the communication is accomplished through a particular channel.

VI. ABBREVIATIONS

B2B	Business-to-business
B2C	Business-to-consumer
CBBE	Customer-based brand equity
CEO	Chief executive officer
CMO	Chief marketing officer
COO	Chief operating officer
CTO	Chief technology officer
DMU	Decision-making unit
ESD	Electrostatic discharge
ERP system	Enterprise resource planning system

1 INTRODUCTION

The interest of practitioners (Herbst & Voeth, 2006) and academics (Keränen et al., 2012; Leek & Christodoulides, 2012; Zablah, Brown, & Donthu, 2010) towards the business-to-business (B2B) brand and its equity has increased over the last 10 years (Klarmann & Fleischmann, 2014). Two of these drivers for this interest are industry consolidation and the increasing substitutability of market offerings, which has resulted in increased competitive forces (Kotler & Pfoertsch, 2006) in B2B markets (Keränen et al., 2012). It is no longer sufficient to simply offer great products and services (Kotler & Pfoertsch, 2006). This conclusion is not limited to statements by researchers in the “B2B brand” field. Literature in the strategic management field describes brands as a key source of competitive advantage. Kay (1993) states that the route of strategy is to concentrate on the company’s distinctive capabilities and describes the reputation of a company as one of the capabilities. Further, Johnson et al. (2008) state that it is unusual that competitive advantage can be explained by tangible resources. An advantage is normally described in terms of how resources are used, while brand image or reputation, as an intangible competence, is difficult to imitate and helps to sustain a differentiation-based advantage. A brand differentiates products and services from the competition (Anderson, Narus, & Narayandas, 2009) and according to Lombriser & Abplanalp (2005) the possession of good image for quality and technology is a required capability.

These statements from the strategic management field support the idea that brand management for industrial goods and services represents a unique and effective opportunity to establish an enduring and competitive advantage (Kapferer, 2012; Kotler & Pfoertsch, 2006). Additionally, the growth of the internet has led to a hyper informed B2B market that is overwhelmed by data concerning potential products and is hence looking for points of reference (brands) to make the right choice (Randall, 2006). By establishing a brand and gaining a favourable competitive position, businesses can successfully set themselves apart from the pack (Kotler & Pfoertsch, 2006).

Although some literature has looked at the aspects of a favourable brand in a B2B context (Bausback, 2007; Herbst & Voeth, 2006; Leek & Christodoulides, 2012; Mudambi, Doyle, & Wong, 1997; Persson, 2010), the majority has concentrated on looking at the relevance of branding and has based the research on consumer-based frameworks. Additionally, the literature has concentrated on the difference between B2B and business-to-consumer (B2C) branding (Keränen et al., 2012). Therefore, the branding theory is not

rooted in a B2B context, which leaves a high potential for further exploration (Keränen et al., 2012). Independent of the context (B2B or B2C), brand equity is about what resides in the mind of the customer (Keller, 2013). The customer in a B2B context is represented by the buying centre, which is composed of a group of staff members fulfilling a business function in the organisation (Sheth, 1973). Although some research has tried to capture the customer's viewpoint in a B2B context, rarely has the entire multiheaded buying centre been considered, nor has a qualitative, explorative approach been employed for taking into account the unique characteristics of the B2B context (Keränen et al., 2012). The role of the brand in a B2B context remains unclear (Gomes, Fernandes, & Brandao, 2016).

Investigation of different views of the individual members of the buying centre is seen as important (Lynch & Chernatony, 2007) for determining customer-based brand equity; nevertheless, no research to this day has focused on investigating the different perspectives of these members. An additional aspect is the nature of the relationship in a B2B context. There are various touchpoints between the supplier and buyer organisations where different departments interact. Also, B2B relationships tend to be long-term and close in nature (Ford, 2002b; Hutt & Speh, 2004), which leaves a lot of room to gain experience with a brand. On the other hand, it is acknowledged that the power of the brand lies in the perception and experiences with it that develop over time (Keller, 2013). In respect to the business relationship characteristics, some literature has looked at the process aspects and recognised that the influence of the brand is dependent on the purchasing process (Caspar, Hecker, & Sabel, 2002). Moreover, the importance of the brand varies depending on the complexity of the process (Yoon & Kijewski, 1996) and the role of the brand depends on the phase of the evaluation process (Srivastava & Mookerjee, 2004). Further literature has described the basic phases of the relationship and listed the interrelating touchpoints (Kotler & Pfoertsch, 2006). Nonetheless, no literature has been found that has investigated the perceptions and experiences of the buying centre members over time and during the course of these interactive, close and long-term business relationships.

Hence, the relevance of B2B brands and branding has been recognised and emerging market dynamics have heightened their relevance; nonetheless, our understanding of these concepts is predominantly based on consumer marketing and has neglected the unique features of B2B, which encompass multiple actors and long-term, multifaceted

interactive relationships. To develop theory from the B2B context, this research focuses on customer-based brand equity, which emerges when the consumer has a high level of awareness and familiarity with the brand and some strong, favourable and unique brand associations (Keller, 2013). In “industrial markets” (meaning markets manufacturing and selling technical products in a B2B context), members of the buying centre constitute the ‘customer’s view’. Moreover, the perspective of the customer is explored with regard to the buying centre’s view and experiences over time.

1.1 Research aims

The aim of this study is to investigate the business function perspective, by considering the phases and relevant factors throughout the relationship and define the relevant touchpoints and the interrelated sources and channels based on an industrial B2B context. The model that is developed aims to visualise the process and the interrelations of the different customer-based brand equity facets. Moreover, the customer-based brand equity model is based on the particularities of the industrial B2B context and will provide a basis for further study and theory development. The conceptual framework is built on the leading customer-based brand equity concepts (D. A. Aaker, 1996; Kapferer, 2012; Keller, 2013), current findings in B2B branding (Baumgarth & Binckebanck, 2011; Bendixen, Bukasa, & Abratt, 2004; Brown, Zablah, Bellenger, & Donthu, 2012; Caspar et al., 2002; Kotler & Pfoertsch, 2006; Kuhn, Alpert, & Pope, 2008; Lennartz, Fischer, Manfred, & Peters, 2015; Lynch & Chernatony, 2007; Mäläskä, Saraniemi, & Tähtinen, 2011; Mudambi et al., 1997; Persson, 2010; M. Richter, 2007; Van Riel, de Mortanges, & Streukens, 2004) and the findings of the B2B marketing literature (Backhaus & Voeth, 2014; Ballantyne & Aitken, 2007; Borghini & Cova, 2006; Ford, 2002b; Garrido-Samaniego & Gutiérrez-Cillán, 2004; Hutt & Speh, 2004; IMP-Group, 2002; W. Johnston, J. & Lewin, 1996; W. J. Johnston & Bonoma, 1981; Keller & Webster, 2004; H. P. Richter, 2001; Sheth, 1973; Srinivasan, 2012; Webster & Wind, 1972). Further, the model and findings will serve to develop the current understanding of customer-based brand equity in a B2B context by an elaborated brand equity framework, which is rooted in a specific industrial B2B context. The model will provide deeper, situation-specific insight into business-based brand equity and serve as the basis for further research in the industrial B2B arena. It will also help practitioners to develop brand equity in their specific field.

The main and leading research question of this project addresses what constitutes customer-based brand equity in the context of complex industrial B2B markets. To investigate the elements of brand equity in this context, the following research questions were devised:

- Q1 What constitutes brand equity for individual members of the buying centre?
- Q2 What factors influence brand equity during each phase in the customer-supplier interface? (from the first point of contact to the last)
- Q3 Through what medium (sources and channels) do individuals within a buying centre perceive the performance of the brand equity-generating factors?

1.2 Research objectives and approach

To develop a comprehensive basis for the exploration, the study aims to critically review the extant literature with the goal of identifying gaps in current research and theory.

The aim is to create a customer-based brand equity model that incorporates the buying centre members to represent the customer in a B2B context.

- The first and leading objective is to understand brand equity from the perspective of the buying centre members (O1).
- As the buying centre members' perspectives are formed through the various touchpoints between the buying and selling organisations, the subsequent objective is to analyse the sources and channels through which the buying centre members perceive the brand (O2).
- Allied to this, the various factors that generate brand equity at each phase of the relationship are identified and critically evaluated so as to offer a basis to define the brand assets for a B2B context (O3).
- These findings are discussed in relation to the findings from previous work, so as to develop an elaborated framework and a customer-based brand equity model (O4).

A multiple case study approach/strategy has been selected to provide insight into the influence of the business context (Saunders, Lewis, & Thornhill, 2009). This strategy/approach is seen to offer the necessary frame to explore the brand equity phenomenon by considering the business relationship process, the business function

perspectives and the influence of the multiple case context. The detail design of the multiple case study follows an embedded and holistic approach (Yin, 2009) by exploring the similarities and differences of the four cases and the identified business functions. In particular, the similarities and differences of the subunits (the different business functions) are of interest in relation to the customer's view. The brand equity-generating factors represent the dependent variable and the different business functions and the varying case context represent the independent variable.

1.3 Research contribution

The findings of this research project are seen to contribute to an improved understanding of customer-based brand equity in relation to the source characteristics, relationship characteristics and brand asset characteristics in a business-to-business context. The identified main assets, the elaborated framework and the developed model are believed to represent the first comprehensive view of industrial brand equity and disclose a dynamic buying centre member (business function) brand equity perspective.

Based on the patterns disclosed amongst the various empirically identified brand association factors and the described factors in the existing literature, three categories—knowledge, capability and attitude—are defined to represent the main brand equity assets. These defined assets are seen to appear in all activities of the supplier brand and therefore present a holistic definition of brand equity. With regard to the identified literature, these defined assets are believed to represent the first holistic approach towards industrial customer-based brand equity. Based on the specificity of purchase the exploration identified some specific brand-association factors. As to the original focus on the business function perspective, exploration of the subunits identified several new business function-specific brand-association factors and some influential business function-specific touchpoints. Some common valued brand association factors were also empirically identified. The various brand association factors identified can serve management figuratively with a box of paints that can be used to develop unique brand colouring. Moreover, the valued factors are found to be influenced by the range of tasks the business function is responsible for. Fulfilment of these tasks appears to offer the opportunity to distinguish oneself in the assigned business function. This offers a high potential for achieving brand loyalty by addressing the self-image. On the other side, the range of tasks is influenced by the size of the organisation and the individual's history within the

company, which leads to a subjective and fluid view. The identified variability shows that at this task-based stage, there is no single view and each case can differ.

Based on the identified touchpoints and the disclosed patterns, eight phases have been defined. The contribution of this study lies in the fact that the phases of the business relationship are defined from an opinion-forming perspective. Furthermore, the degree of influence of each phase on the entire business relationship is considered, starting with the first contact and finishing with termination of the business. The characteristics, the number and the rating of the identified touchpoints have allowed disclosure that the valued intensity of the relationship appears to be influenced by the customer's own business context. Moreover, the perception-influence of the different phases throughout the business relationship has been identified. A further new finding is that the business relationship starts with a one-way communication and develops to an interactive relationship. An interactive relationship can lead to relational values with staff members, which are also given to the corporate brand. The analysis of the relationship characteristics also discloses that the focus of the buying centre evolves. It starts with a focus on capability and competence characteristics and moves towards a focus on a favourable attitude.

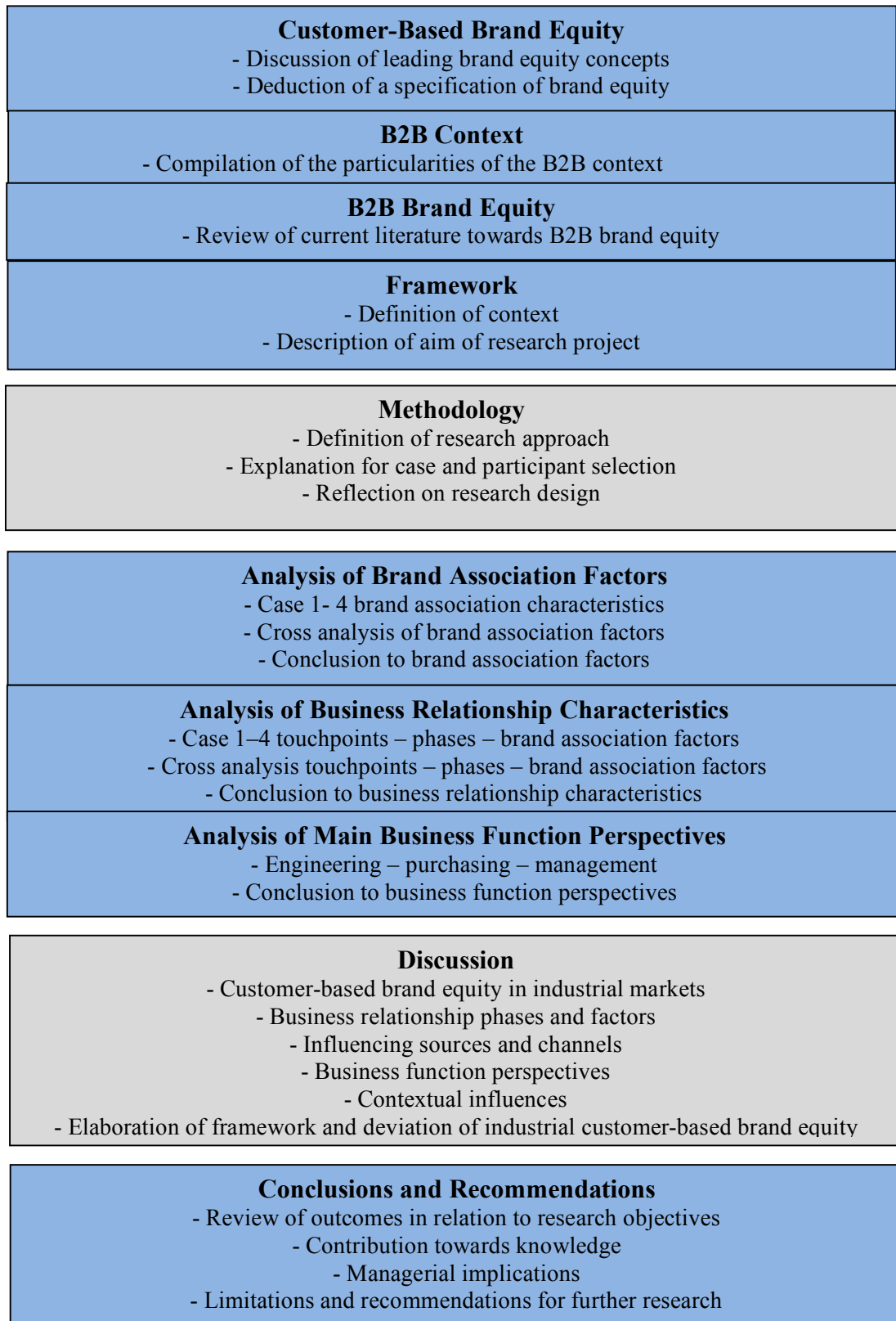
The patterns of the influential sources and the statements of the participants suggest that the corporate brand in a B2B context appears as a "team brand". The focus at the beginning of the business relationship is on the team and evolves to focus on the team members. The exploration of the sources also identified the so-far unrecognised relevance of the engineering business function. Furthermore, the influence of the buying centre member's individual historical network appears to be a new disclosed source.

Based on these findings, this research project offers management some suggestions concerning brand assets, brand relationships and the source characteristics and suggests an approach to procedures. Moreover, the findings also induce some areas for further research.

This thesis, describing the research project and its insights, is organised as illustrated in the structure detailed in Section 1.4.

1.4 Thesis structure

The thesis is composed of the following five main chapters.



Author's own construction

Figure 1: Thesis structure

The literature review starts by reviewing the leading brand equity concepts and specifying brand equity for the research project. The second part outlines the industrial B2B context and the third part of the literature review collects the insights on brand equity literature regarding the B2B context. The next part of the thesis defines the research context by outlining a framework and describes the aim of the research project. The methodology chapter describes the general research approach, the methodology, the executed methods and ends with a reflection on the selected design. The analysis chapter is divided into three main parts: analysis of the brand association factors, analysis of the relationship characteristics and analysis of the three main business function perspectives. The results and insights from the analyses are discussed in relation to the existing literature. The defined research questions and objectives are reviewed and an elaborated framework and a customer-based brand equity model are then introduced. The thesis concludes with a reflection on the findings in relation towards the research objectives, contribution towards knowledge and implications for management. Its limitations are also outlined and possible paths for future research are described.

2 LITERATURE REVIEW

The literature review is divided into four main sections. To reach a common understanding of brand equity, the first section discusses the different perspectives on the topic and outlines how the brand equity construct is defined for this research project.

The characteristics of the business-to-business (B2B) markets are also discussed to outline the setting in which brand equity is explored.

The third section of the review presents the current findings regarding the identified elements of B2B brand equity, which are seen to influence and determine brand equity in an industrial context.

After the conclusion, which summarises current knowledge, the final section presents the conceptual framework for this study and the exploration of brand equity in industrial B2B markets. Moreover, the final section describes the aims of this research project.

2.1 Introduction and specification of brand equity

The specification of brand equity forms one of the main pillars of this research project. To place brand equity in its wider context, this section starts with a general discussion of the role and function of brands and branding. This section then goes on to consider the three most influential brand equity concepts and ends with a conclusion and specification of brand equity.

2.1.1 The meaning, the role and the functions of brands

Historic records reveal that branding has played a role since 4000 years ago (Moore & Reid, 2008). Branding, or at least trademarks, can be traced back to ancient pottery and stonemasons' marks, which were applied to handcrafted goods to identify their source (Keller, 2013). These marks enabled basic marketing functions, such as sorting and storage (Moore & Reid, 2008). In medieval times, potters' marks were joined by printers' marks, watermarks on paper, bread marks and the marks of various craft guilds (Keller, 2013). In that way the craft guilds controlled infringement (Keller, 2013).

Beyond this basic role as a sign to identify the source, the sign and the interrelated source (for example, the place of origin) served as an indication for quality and therefore also as

a reduction of risk for purchase (Moore & Reid, 2008). Therefore, the placed signs in these times were already found to have activated associations in the mind of the customer.

According to Bastos & Levy (2012), a brand starts as a sign and develops to a symbol. In the beginning, the sign merely conveys information and is limited to serve as a trademark. With time the brand becomes a symbol, which owns associations in addition to the obvious meaning (Bastos & Levy, 2012). According to this description, a brand develops from a sign to a symbol. In addition, our understanding of the phenomena appears to develop from a more functional view—defining the ownership and characterised by informational characteristics—to a view that recognises the brand as a multidimensional, multifunctional and malleable entity (Bastos & Levy, 2012).

One of the main functions of a brand is the reduction of perceived risk (Caspar et al., 2002; Schmitt, 2011). According to Blois (2002), the sources of risk in a business-to-business (B2B) context stem from uncertainties in relation to demand and supply. Backhaus & Sabel (2004) stated that a brand reduces risk, as it can be used as justification and gives a certain security concerning the competence of problem solving and continuity. Moreover, a brand appears to reduce the complexity during decision making (Backhaus & Sabel, 2004). The need for complexity reduction in a B2B context is fostered through the increasing tendency of selling complete solutions (Kotler & Pfoertsch, 2006). Complete solutions have various partial performances that need to be assessed, which represents a significant challenge for the B2B customer. According to these findings and based on the finding by Schmitt (2011) that the risk reduction has more effect on the buying and paying willingness in a B2B market than in the business to consumer (B2C) market, the aspect of risk reduction seems quite distinct.

Another function aspect is the saving of information costs (Schmitt, 2011) by supporting communications, which results in more efficient information transfer (Backhaus & Sabel, 2004; Caspar et al., 2002; Torelli, 2013), including for the customer (Kotler & Pfoertsch, 2006).

Additionally, the brand fosters the profiling of similar products and adds value by communicating tangible and intangible factors (Kotler & Pfoertsch, 2006). For example, the brand communicates the values of the company and transfers the reputation (Backhaus & Sabel, 2004). Therefore, the brand gives the customer orientation by reducing the effort

to search for possible suppliers and serves as a sign for desired attributes (Torelli, 2013; Wünsche, 2010). A user's selection of particular brands then also tells something about the user, which is occasionally desired by the user. (Torelli, 2013).

This aspect is described as the value added/image benefit of a brand (Caspar et al., 2002; Kotler & Pfoertsch, 2006); also defined as the reflected customer imagery (Kapferer, 2012). Self-expressed values do not seem to be as relevant in a B2B context as in a B2C context; nevertheless, the chosen brand is perceived by the corporation (Caspar et al., 2002). This perception can influence how the organisation perceives the buying centre members and therefore also influences their self-perception (Kotler & Pfoertsch, 2006).

A brand is found to be a source of meaning that consumers use to fulfil a variety of individual and collective needs and is an enabler of cultural dialogue (Torelli, 2013). This meaning is created by the company's action (Torelli, 2013) and is an interdisciplinary creation, which calls for brand management (Bastos & Levy, 2012).

Different concepts of branding have evolved, which aim to effectively influence and elaborate the meaning of the brand (Holt, 2004). Holt (2004) describes four main concepts. One of the first and still dominating concepts is mindshare branding, where the brand is defined to be built by a set of abstract associations and the consumer perceives the benefits during buying and using the product (Holt, 2004). Emotional branding sees the brand as a relationship partner, where the consumer interacts with the brand and values building a relationship with the brand (Holt, 2004). In viral branding, the brand is defined as a communication unit, which spreads through lead customers; the brand is discovered by customers as their own (Holt, 2004). A further recent concept is the idea of cultural branding, which sees the brand as a performer and container for an identity myth and that the customer particularly values the reinforcement of self-expression (Holt, 2004). Moreover, cultural branding understands that the significance of a brand largely rests in the ability to carry and communicate cultural meaning in particular historical contexts (Moore & Reid, 2008).

According to Holt's (2004) explanations, these branding concepts appear to be particularly appropriate for particular markets. The mindshare concept is particularly applicable for functional categories and complicated goods. Emotional branding appears particularly effective for services and speciality goods. Following Holt's statements and

considering the characteristics of the B2B markets, it appears sensible to focus on these two approaches. Interrelated with the branding concept is the aim to understand brand equity, the generated meaning. The following three reviewed brand equity concepts focus on the mindshare and emotional aspects and aim to capture brand equity from the customer's perspective.

2.1.2 Review of influential brand equity concepts

Two of the most influential concepts towards the idea of branding and brand equity have been described by Aaker (1996) and Keller (2013) (Bastos & Levy, 2012). Firstly, Aaker (1996) initialised the classical conceptualisation of brand equity (Biedenbach & Marell, 2010). Secondly, Keller (2013) has provided one of the most frequently cited customer-based brand equity models and, according to Kuhn, Albert and Pope (2008) and Gürhan-Canli, Hyran, and Sarial-Abi (2016), one of the most comprehensible models available in brand literature. In addition, Kapferer's (2012) concepts regarding brand equity and identity will be considered for this review. Kapferer's (2012) approach towards structuring brand equity in brand assets, brand strengths and brand value help towards providing a grasp on the concept and has improved the theoretical understanding of brand equity (Anselmsson, Johansson, & Persson, 2008). Moreover, Kapferer's (2012) brand identity prism is found to offer a differentiated view of the brand identity facets and the interrelation between the sender and the recipient.

One official brand equity definition in marketing science is mentioned by Leuthesser (as cited in Kapferer, 2012): "The set of associations and behaviour on the part of a brand's customers, channel members and parent corporation that permits the brand to earn greater volume or greater margins than it could without the brand name." (p. 13) This definition seeks to offer a broad scope of what brand equity includes and concludes with the financial contribution. The financial aspect of brand equity, also often named "brand value", is one of the research areas that are particularly investigated by business organisations, rating agencies and consulting companies (Salinas & Ambler, 2009). This area of research is developing formulas to calculate the brand value and describe it normally in an amount of money, percentile value or an index (Kapferer, 2012). For example, an evaluation of brand rating—brand database with more than 300 brand values of different industries—has shown that the realised brand equity (brand value) in the B2B markets is on the average 35% of the company's value (Brandes & Biesalski, 2010).

Aside from the direct financial contribution, the owner of a strong brand also profits from other aspects concerning effectiveness and synergy effects (Keller, 2013):

- Increased marketing communication effectiveness
- Additional brand extension opportunities
- Possible licensing opportunities

The other research area seeks to grasp the behavioural side of brand equity, considering what psychological aspects compose brand equity and what intensity levels are being passed through and created. For example, Keller (2013) suggests that a strong brand is about building and maintaining strong perceptions in the minds of customers. These perceptions can give customers a certain orientation, reduce the uncertainty of long-term quality and create possible positive emotional experiences (Backhaus & Voeth, 2014). Moreover, Lamons (2005) mentions that the stronger and more focused the brand-related expectations are, the higher the brand equity. Considering these few statements, the equity of a brand is about building and maintaining perceptions, which give orientation and lead to strong and focused expectations. Further literature has tried to conceptualise and categorise the perceptions that create brand equity, with one of the most influential concepts being offered by Aaker (Bastos & Levy, 2012).

Aaker (1996) states that brand equity is a set of assets and liabilities that are linked to a brand's name and symbol and add to—or subtracts from—the value provided by a product or service to a company and/or to a company's customer. He defined four major asset categories, which are established today as the four dimensions that have a positive correlation to brand equity (D. A. Aaker, 1996; D. A. Aaker & Joachimsthaler, 2000; Keller, 2013; Pförtl & Schmid, 2005):

- Brand awareness
- Brand associations
- Perceived quality
- Brand loyalty

Aaker (1996) sees in brand awareness the strength of the brand's presence in the consumer's mind. This awareness starts with the customer being able to recognise the brand and goes further when the customer is able to recall the brand. The first brand that

comes to a customer's mind when asked to mention brands in a certain product class is seen as the top-of-mind brand. The ultimate awareness level is reached when the product class is defined by the brand; for example, "Kleenex". Keller (2013) defines this aspect of awareness as the depth of awareness. A further aspect of awareness to consider is the breadth of awareness, which refers to the preferable wide range of purchase and usage situations where the brand comes to mind (Keller, 2013).

Brand loyalty is about taking care of existing customers and making sure that future activities do not lead to loss of the existing customers, which are often willing to pay more for the brand (D. A. Aaker, 1996). In this context, Keller (2013) describes the aspect of "behavioural loyalty", which defines the frequency and the amount of purchase. Additionally, Keller (2013) points out that with "attitudinal attachment"—viewing the brand as something special—the customer's identification with the brand community and the customer's expression of active engagement determine an exceptional brand resonance. In summary, the quality and intensity of the attitude towards the brand appears to result in an extraordinary willingness to pay and buy. Aaker (1996) states that to enhance loyalty to a brand, it is advisable to work on the other assets such as brand awareness, perceived quality and a distinct brand identity.

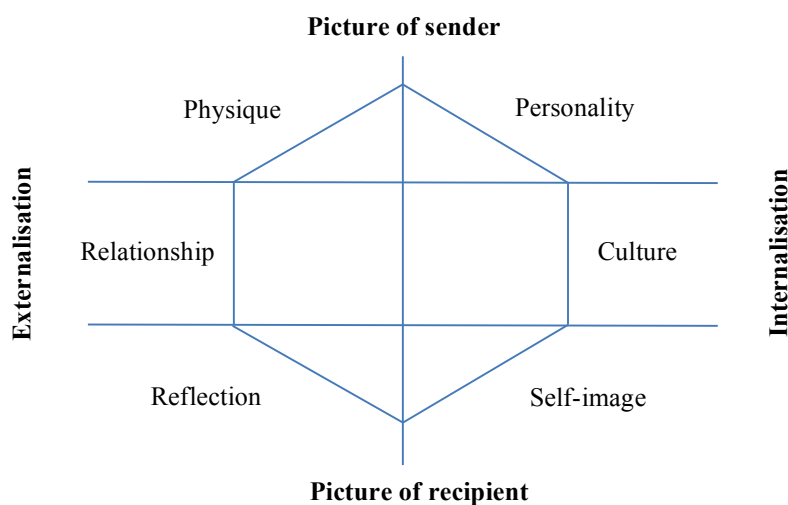
Brand associations are driven by the brand identity (D. A. Aaker, 1996) and have to be favourable as well as possibly unique (Keller, 2013). According to Aaker (1996), brand identity is comprised of four perspectives (page 79):

- The brand as a product (product scope, attributes, quality/value, uses, users and country of origin)
- The brand as an organisation (organisation attributes—innovation, consumer concern, trustworthiness, local vs. global)
- The brand as a person (personality—genuine, energetic, rugged—brand-customer relationship, friend advisor)
- The brand as a symbol (visual imagery and metaphors, brand heritage)

“The perceived quality is usually at the heart of what customers are buying, and in that sense it is the bottom-line measure of the impact of a brand identity.” (D. A. Aaker, 1996, p. 19)

The breakdown into these four perspectives and their subtopics offers a good overview of the different aspects of brand identity. Nevertheless, the explanation seems somewhat rough compared to the accomplished brand identity prism by Kapferer (2012). The model is seen to have captured the aspects of brand identity out of a more elaborated view by basing the model on the constructivist school of communication (Kapferer, 2012).

The developed brand identity prism (see Figure 2) discloses a more detailed picture of what brand identity realises. It also visualises the interrelation of the aspects and discloses some generic categories of the facets. The prism divides the brand identity into six facets (Kapferer, 2012).



(Kapferer, 2012, p. 158)

Figure 2: Brand identity prism

The physique facet of the prism represents the brand's backbone, defines its tangible added value and comprises the flagship product, which represents the brand's qualities. The second facet is personality, which is the perception of the brand as if it were a person. The third facet is the culture of the brand, meaning the values of the brand that are the source of the brand's inspiration and plays an essential role in differentiating the brand. Additionally, the country of origin can be an aspect of the brand's culture. Nonetheless, corporate culture will form the cultural perception and will limit the variety of which values can be transferred (Kapferer, 2012). Further, a brand is about a relationship. Brands also stand for a particular relationship to, for example, a demographic group or an institution. Nike, for example, relates its values to the Olympic games (Kapferer, 2012). The fifth facet of the brand identity prism is that a brand also reflects a particular group of customers. For example, certain brands are associated with younger people and others

with fathers. The last facet of the prism is that the brand speaks to a specific self-image. For example, Ralph Laurent affirms fashion and a sense of belonging to the elite (Kapferer, 2012).

The brand prism categorises the identity of the sender (the brand) in the picture by the physique and the personality facets. The reflection and the self-image facets are allotted to the recipient (the customer). The culture and the relationship facets act as the bridge between the sender and the recipient. Additionally, the prism illustrates, by dividing the facets into externalisation and internalisation sections, that there are explicit aspects and more internal implicit aspects of a brand.

The brand personality aspects of Aaker (1996) and Kapferer (2012) seem to be widely congruent. Nevertheless, Aaker (1996) incorporates the relationship aspect where the prism defines the relationship aspect as a facet of its own. Further, the brand prism distinguishes between the attributes of the physical product, the reflected user and the culture, which includes the country of origin. The brand organisation perspective of Aaker (1996) is considered by the culture facet of the prism.

As mentioned, the brand identity prism offers a diversified view of the aspects of brand identity and helps to recognise the function of the facets and their interrelation. Nevertheless, the brand symbol perspective of Aaker (1996) seems not to be directly represented by the brand prism, although the subtopics brand heritage and the metaphors are seen to be an important part of brand identity.

Brand identity is defined as being influenced and formed by the sender, the brand itself or in the best case by brand management (Kapferer, 2012). The brand identity and behaviour of the brand are transported through different media as products, people, places and communication (Kapferer, 2012). The brand image is created on the receiver's side by way of the medium, influences from the competition and other noise (Kapferer, 2012). The brand image construct itself is categorised by different aspects of brand assets, as the four previously introduced assets of Aaker (1996). Kapferer (2012) has also defined an overview of brand assets, as shown in Table 1.

Table 1: Brand assets, strength and value

Brand assets >	Brand strength >	Brand value
-Brand awareness -Brand reputation (attributes, benefits, competence, know-how, etc.) -Perceived brand personality -Perceived brand values -Reflected customer imagery -Brand preference or attachment -Patents and rights	-Market share -Market leadership -Market penetration -Share of requirements -Growth / loyalty rate -Price premium -Percentage of products the trade cannot delist	Net discounted cash-flow attributable to the brand after paying the cost of capital invested to produce and run the business and the cost of marketing

(Kapferer, 2012, p. 14)

In Kapferer’s (2012) approach toward brand equity, he connects brand assets—the behavioural aspect—to brand value by adding brand strengths to the brand equity concept. The structuring in these three categories has significantly helped in grasping the concept and improving the theoretical understanding of brand equity (Anselmsson et al., 2008). The brand value is the profit potential of brand assets, mediated by brand market strengths. While the assets mentioned by Kapferer (2012) also focus on the perception of the customer, he also brings the side of the brand owner (sender) into focus by mentioning patents and rights. The overview has some similarities to “the brand equity ten” (see Table 2), the ten brand equity measures that are grouped into the four asset categories extended by the group market behaviour measures introduced by Aaker (1996).

Table 2: Brand equity ten

Category / Assets	Measures
Loyalty measures	1. Price premium 2. Satisfaction/loyalty
Perceived quality / Leadership measures	3. Perceived quality 4. Leadership/popularity
Associations / differentiation measures	5. Perceived value 6. Brand personality 7. Organisational associations
Awareness measures	8. Brand awareness
Market behaviour measures	9. Market share 10. Market price and distribution coverage

(D. A. Aaker, 1996, p. 319)

The similarities seem somewhat confusing, as some measures seem to correspond with the assets of Kapferer. The following allocation using Kapferer’s categorisation into assets and strengths help dissolve the confusion and improve understanding of what brand assets are.

The first two measures, “price premium” and “customer satisfaction”, represent Aaker’s customer loyalty asset. Kapferer classifies the “willingness to pay a price premium” as a strength. The measure “customer satisfaction” can be allotted to Kapferer’s asset “brand preference and attachment”; however, the description of the measure also hints at measuring the percentage of customers who are loyal, which corresponds to the strength category of Kapferer. The measure of “perceived quality” is categorised in the asset “brand reputation” and is part of the “perceived brand value”. The fourth “leadership/popularity” is stated as a strength in Kapferer’s concept, described as “market leader”. The fifth measure, “perceived brand values”, is listed as an asset in Kapferer’s categorisation. The next measure is the “perceived brand personality”, which is about what kind of person the brand would be if it were to be human (D. A. Aaker, 1996; Kapferer, 2012). Aaker lists brand personality as one of the brand association measures, whereby Kapferer lists brand personality as a separate asset.

Aaker hints in his description of the measure “brand personality” on the topic user imagery, which Kapferer mentions under the term customer reflection. The customer reflection is the user image of how the customer wishes to be seen. In the list of assets, Kapferer places the term “reflected customer imagery” as one of the assets. Noticeable is that the actual customer target group will often differ from the user image, as people often want to achieve a certain objective by consuming a particular brand (Kapferer, 2012). In this context, Kapferer also describes the customer’s self-image as an aspect of brand identity, which customers create themselves through their attitude towards the brand.

The seventh measure, “organisational associations”, seems to be considered by the asset “brand reputation” of Kapferer. The measure “brand awareness” is equally a listed asset. The three last measures—“market share” and “market price” and “distribution coverage”—can be clearly allotted to the strength category of Kapferer.

Looking at the difference in the detailed specifications, there seems to be room for discussion; however, identification of the detailed differences is not relevant for the aim of this research project. Nevertheless, the basic difference is found in the hierarchical level of the categorisation, what is understood to be covered by a specific term or definition and the emphasis given to the individual topic. For example, Aaker groups several aspects under the term brand associations, and classifies the association “perceived quality” as a separate asset. Both agree on the definition of brand awareness.

Some of the measures suggested by Aaker correspond with Kapferer's strengths. This is reasonable, as the strength category factors are the consequences of the brand assets and therefore give an indication about the intensity of the assets. The allocation of some of Aaker's measures to the asset category seems more suitable. Particularly, the measures for brand associations are seen to be separate assets. The term brand associations represents a good generic term; nevertheless is also found to be a very broad term that offers a limited contribution towards the understanding of the brand equity construct. Further, it seems important to clearly distinguish between the facets of what is being perceived and what is more a reaction towards it. Kapferer's (2012) separation into strengths and assets provides a good overview of this interrelation and clearly distinguishes between the assets and the resulting behaviour (strengths).

As previously mentioned, any perception, independent of its categorisation, is part of the brand image (Persson, 2010). On the other hand, brand image has also been defined as a separate aspect and is recently seen to represent a more artificial creation of "image makers". On the one hand this is possibly influenced by the company and the competition and on the other hand by noise, meaning imitations by competitors and effects of brands not having a clear scope and not being authentic. In this context "brand reputation" is seen to have more depth, is more involving and is the long-term judgement of the market (Kapferer, 2012).

Accordingly, Kapferer (2012) lists brand reputation as one of the assets, which includes the brand's attributes, benefits, competence, know-how, etc. This seems confusing since according to the definition of brand image by Persson (2010), brand reputation would belong to brand image.

Considering these statements, multiple interpretations of what the term brand image represents appear to exist. Nevertheless, both aspects of brand reputation—representing the organisational associations or representing the more reliable brand image—seem to be existing aspects. For this research project, brand reputation will be defined as a brand asset that includes the organisational associations. No further differentiation between artificial and more reliable brand image will be considered. However, brand image is defined to include the combined associations of the customer (Keller, 2013) and

independent of the categorisation (brand awareness, perceived quality, etc.) any perception is part of the brand image (Persson, 2010).

As Bastos and Levy (2012) mention, the brand phenomenon has, according to our understanding, developed into a multidimensional, multifunctional and malleable entity. In fact, our understanding of the brand phenomenon appears to still be evolving. Nonetheless, the constructs of Aaker (1996) and Kapferer (2012) are seen to offer a good outline of the multiple dimensions of brand equity. After this discussion of the different assets of customer-based brand equity and their delineation towards other aspects, the following concept goes beyond the categorisation of the assets and looks at the different stages of the creation of customer-based brand equity.

2.1.3 Customer-based brand equity and its stages

It seems self-explanatory that to create brand equity, the associations have to be positive and enduring in a customer's mind. To answer what makes a strong brand and how a strong brand is built, Keller introduced, in an award winning paper, a customer-based brand equity (CBBE) model (Keller, 1993).

Customer-based brand equity is “the differential effect that brand knowledge has on consumer response to the marketing of that brand.” (Keller, 2013, p. 69)

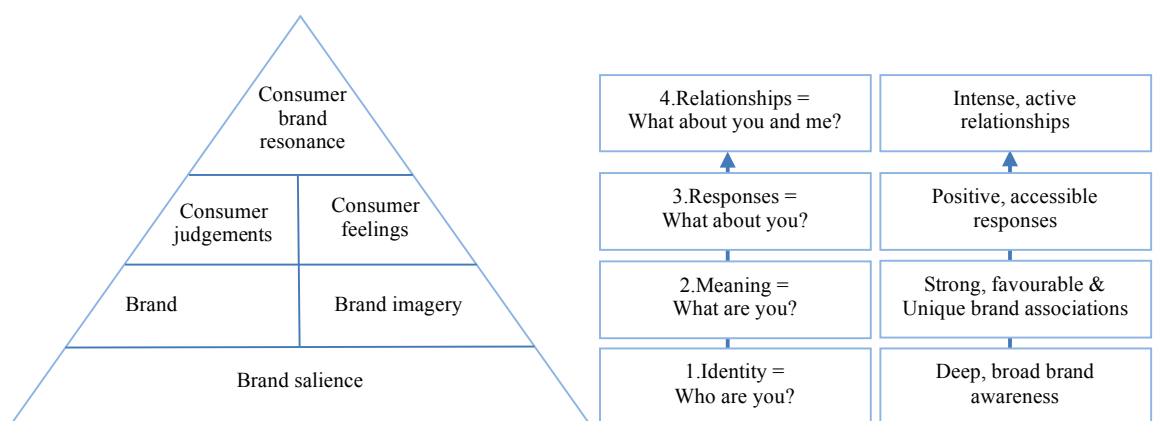
Brand knowledge means the knowledge that the consumer gains by direct or indirect contact. Differential responses are the perceptions, preferences and the behaviour to all aspects of brand marketing. When there is no difference, the brand can be classified as a commodity. (Keller, 2013)

Brand knowledge, which is seen as key to creating brand equity, has two components: brand awareness, which represents the strength of a brand, and brand image, which represents the meaning of the brand for the customer (Keller, 2013). Noticeable is that brand knowledge represents the interdependence of awareness and associations to create brand equity.

Therefore “customer-based brand equity occurs when the consumer has a high level of awareness and familiarity with the brand and holds some strong, favourable and unique brand associations in memory” (Keller, 2013, p. 73).

The basic premise of the CBBE (customer-based brand equity) model is that the power of the brand lies in what customers have learned, felt, seen and heard about the brand as a result of their experiences over time. In other words, the power of a brand lies in what resides in the minds of customers. (Keller, 2013, p. 69)

In contrast to the list of assets by Aaker (1996) and Kapferer (2012), the CBBE model (see Figure 3) visualises the dependencies and stages that a brand goes through in the mind of the customer. The CBBE model sets up a customer-based brand equity pyramid.



(Keller, 2001, p. 7)

Figure 3: Customer-based brand equity pyramid

The pyramid starts with brand salience, which represents the brand awareness corresponding to Kapferer (2012) and Aaker (1996). Brand awareness is recognition, recall or even top-of-mind and also includes broad awareness that is defined as the preferable wide range of purchase and usage situations where the brand comes to mind (Keller, 2013). Brand imagery refers to intangible aspects such as user profiles, purchase and usage situations, brand personality and values, history, heritage and experiences that are directly or indirectly experienced (Keller, 2013).

The user profile refers to the associations the customer has about the actual or an ideal user of the brand, which may be based upon demographic or more abstract psychological factors (Keller, 2013). “Psychographic factors might include attitudes towards life, careers, possessions, social issues or political institutions.” (Keller, 2013, p. 114) The usage situation represents brand associations with regard to the type of distribution channel, the ease of purchase, associated rewards and can even relate to associations about the time (day, month, year) that the brand is used (Keller, 2013). The brand personality

refers to personality aspects as if a brand were a person. Possible attributes could be genuine, energetic or rugged. There are five dimensions of brand personality; namely, sincerity, excitement, competence, sophistication and ruggedness (J. L. Aaker, 1997). The history aspect refers to personal past experiences or the experiences of friends and family or even a general public event. Historical aspects create a certain heritage connected to the brand (Keller, 2013).

The aspects of brand imagery including brand personality, values, heritage, user profiles, use situations etc. largely correspond to the brand identity aspects mentioned by Aaker (1996) and Kapferer (2012). Nevertheless, Keller (2013) views the imagery as the second stage of a process and presents brand imagery as one side of a medal, where brand performance represents the other side.

At the same stage, brand performance represents "...how well the product and service meets customer's more functional needs" (Keller, 2013, p. 112). In this context, aspects such as the perceived quality, utility, aesthetics and economics are assessed. Garvin, cited by Keller (2013, p. 113), defines five types of attributes and benefits that underlie brand performance.

- Primary ingredients and supplementary features
- Product reliability, durability and serviceability
- Service effectiveness, efficiency and empathy
- Style and design
- Price

Additionally, "...the perceptions of product performance are affected by factors such as the speed, accuracy and care of product delivery and installation; the promptness, courtesy, and helpfulness of customer service and training; and the quality of repair services and the time involved" (Keller, 2013, p. 113).

During this stage, the perception of brand performance and brand imagery can form strong, favourable and unique brand associations.

At the following stage the customer reacts to the brand responses and judges the brand with regard to quality, credibility, superiority and whether the brand is seen as

considerable (Keller, 2013). In this stage the customer reflects on the imagery and performance of the brand. The customer also reacts emotionally with possibly feeling safe when choosing the brand and will trust a brand if the brand response is seen as honest (Keller, 2013). In the final stage, the customer views the brand as something special; they will have developed a certain attachment and loyalty toward the brand that leads to repeated purchases. At this stage, the customer will also identify with the brand community and will engage with formal or informal representatives of the brand (Keller, 2013).

Apart from the inconsistent use of terms, Keller's (2013), Kapferer's (2012) and Aaker's (1996) explanations and models appear to complement each other.

Keller's (2013) process-oriented model underpins the noticed underlying dependency among awareness, associations and loyalty. This interrelation is supported by the findings of Biedenbach & Marell (2010) who show a hierarchical effect between brand associations, brand quality and brand loyalty in a professional service industry context. Keller's concept of brand knowledge—which recognises the interrelation of the awareness and the associations for creating a strong brand—is seen as a valuable contribution towards the understanding of brand equity.

All three concepts offer insight into the construct brand equity. The main findings are summarised in Section 2.1.4 and brand equity is specified as a basis for the research project.

2.1.4 Conclusion and specification to brand equity

In agreement with Bastos & Levy (2012), a brand starts as a sign and develops into a symbol. This pattern appears to have been no different in ancient and medieval times from today. The brand starts as a functional trademark and becomes a symbol with inherent meaning (Bastos & Levy, 2012). In this role the brand serves to reduce information costs, reduce risk, act as a facilitator for imaginary benefit (Caspar et al., 2002) and gives the customer orientation by serving as a sign for the desired attributes (Torelli, 2013; Wünsche, 2010). New branding concepts including cultural and viral branding are responding to the consumer's requirements of identity and fashion (Holt, 2004). The mindshare and emotional branding concepts that address the functional categories—complicated goods, services and speciality goods (Holt, 2004)—appear to be suitable in

a B2B context and are seen to be considered by the discussed brand equity concepts and their defined assets.

As the interest of this research project lies on the customer, the focus is on the perception of the customer. So far, science has identified different categories of relevant perceptions, which are defined as assets. Nevertheless, some confusion remains about of how an asset is defined. Kapferer's (2012) classification of assets, strengths and values helps toward understanding the interrelation between perception and the effect. For this research project, an asset will be delimited to the different aspects of the customer's perception and will not incorporate any effect of perception. Aaker's (1996) four assets remain a good starting point for grasping the basic aspects of brand equity. Aaker's emphasis on the brand association "perceived quality" appears somewhat immoderate. The other concepts discuss quality as a major factor, yet have implicitly woven this topic in interrelating topics, which is seen as sensible given that the term quality is a major aspect, albeit one with many perspectives that have to be considered to grasp the brand equity construct.

Apart from brand awareness and brand loyalty, the assets listed by the different concepts vary in level of detail and also which aspects are integrated into the different categories. Especially the term "brand associations" of Aaker seems somewhat rough. A synthesis of Kapferer's and Keller's more detailed categorisation seems sensible to receive an overview of the relevant aspects of the assets.

The literature differentiates between brand identity and brand image. Brand identity represents the description of what the brand is and can be modified through the brand itself by acknowledging the current status, defining a favourable brand identity and taking measures to reach the aimed brand identity. Brand image represents what the customer perceives and can be only partly influenced by the brand itself (Kapferer, 2012). The customer's perception is represented by the brand assets (the brand image), which define the brand equity. The interrelation of the defined assets has a hierarchical character (Biedenbach & Marell, 2010; Keller, 2013). Keller's (2001) CBBE model shows the interrelation among the assets and describes a stage process that is visualised in the customer-based brand equity pyramid.

The range of “brand asset subtopics” is wide and every topic is in itself a construct with diverse facets that are also interleaved with each other. For this research project it seems important to have an overview of the diverse subtopics; however, based upon the aim of exploring brand equity in an industrial context, rather than confirming detailed definitions, it is not seen as relevant or productive to define and delimit each topic. On the other hand, the brand assets and their subtopics that are relevant in an industrial context, and how these are influenced in the customer’s mind, are considered to be a major issue in terms of understanding brand equity. Keller’s (2013) statement—that brand equity results out of experiences over time and is generated out of constant brand performances and is represented by a high familiarity and favourable brand associations in the mind—is apparent. The brand becomes a symbol with meaning (Bastos & Levy, 2012).

The main insights that have been realised from the reviewed concepts are summarised in one table (Table 3), which will serve as a guideline to explore brand equity in an industrial context. Based on Aaker’s (1996) brand equity dimensions, brand awareness and brand associations are defined as two of the brand’s assets. The relevance of quality is seen to be represented within the brand performance subtopic and is also an underlying aspect of the brand values and brand reputation. Moreover, the brand loyalty asset is allotted to the brand resonance asset, which Keller (2013) visualises as the top stage of customer-based brand equity.

Table 3: Brand equity construct

Customer perception	Stages / Assets	Subtopics	Influencing aspects
Brand image	Stage 3: Brand resonance	Preference, relationship, loyalty	Process (Stages) Dependent on time and experiences
	Stage 2: Brand associations	-Brand reputation (organisation, innovation, consumer concern, trustworthiness, competence, know-how) -Brand values -Brand personality -Brand performance (product, services, etc.) -Brand history and heritage -The brand’s relationship -User profiles (reflected customer imagery) -Purchase and usage situations	
	Stage 1: Brand awareness	-Top-of-mind: recalled, recognised -Range of situations	

composed by the author according to reviewed concepts (D. A. Aaker, 1996; Kapferer, 2012; Keller, 2013)

With respect to the finding of Biedenbach & Marell (2010) and the customer-based brand equity pyramid of Keller (2013), there appears to be a hierarchical process that can be delineated into three stages. Keller's (2013) distinction between perception and judgement is summarised under the heading brand associations (stage 2). Within this stage the associations are seen to be judged and possibly revised in relation to the response of the brand (Keller, 2013). The column "influencing aspects" picks up Keller's (2013) statement that the power of a brand lies in the customer's experiences over time. Moreover, Keller's (2013) pyramid stages demonstrate that the development of brand equity is about a process. The first stage (stage 1) comprises the achievement of brand awareness (D. A. Aaker, 1996; Kapferer, 2012; Keller, 2013). In stage 2, which comprises the brand associations, the concepts vary in the content considered and how it should be structured. Nonetheless, the subtopics listed represent an overview of the major brand association topics of Aaker (1996), Kapferer (2012) and Keller (2013). The final stage (stage 3), which corresponds to Keller's (2013) asset of brand resonance, represents the point where the customer has developed a preference, an active relationship and loyalty and identifies with the brand community. Persson's (2010) definition of brand image is considered (see Section 2.1.2), where brand image is defined as the superior frame of the brand's assets and their subtopics.

The composed brand equity construct will serve as orientation to explore brand equity in an industrial context; nonetheless, the focus will be on understanding what resides in the customer's mind. Therefore, a suitable underlying frame to explore brand equity and its assets is defined by the basic premise of Keller's CBBE model. "...The power of a brand lies in what customers have learned, felt, seen and heard about the brand as a result of their experiences over time." (Keller, 2013, p. 69) Furthermore, a brand is formed through all the activities of a company and at the same time a brand also forms a bracket over all activities of a company (Brandes & Biesalski, 2010).

This outline of brand equity serves as one of the three pillars to explore brand equity in an industrial context. The second pillar that needs to be described is the industrial context.

2.2 The industrial business context

The industrial business literature describes some specific characteristics that need to be considered in order to lay a sound initial position for exploring brand equity in the industrial context.

In 1967 Robinson, Farris and Wind happened to be one of the first authors to publish an article concerning the influence of the purchase characteristics (buy types and purchasing process) on the buying behaviour and defined the “buy-grid” framework (cited by Srinivasan, 2012). Later Webster and Wind (1972) and Sheth (1973) developed two comprehensive models that explain the influential aspects towards buying behaviour. In 1981 Johnston and Bonoma added some influential purchase characteristics (importance, the complexity and the time pressure) and investigated the interaction patterns of the buying centre. In an article in 1996, Johnston and Lewin summarised the influential purchasing characteristics as follows. The organisation’s buying behaviour is influenced by the product type, the buy type, the uncertainty of the purchase, the complexity, the time pressure for the purchase and the importance of the purchase (W. Johnston, J. & Lewin, 1996). One of the first models, the interaction model (IMP-Group, 2002), which focuses on the relationship characteristics and the dependencies between the selling and the buying organisations, was developed by the IMP Group in 1982 (Turnball, Ford, & Cunninham, 1996). In 1992 Johanson and Mattsson described the interrelation of the customer/supplier interdependence and the degree of specialisation, which increases the intensity of the relationship (Johanson & Mattsson, 2002). The more recent works of H. P. Richter (2001) and Kleinaltenkamp (2000) illustrate the varying degree of the relationship intensity on behalf of the different business types. The authors relate the degree of relationship intensity to the specificity of the realised performance Richter (H. P. Richter, 2001) or the required external factor to create the performance (Kleinaltenkamp, 2000). Moreover, Backhaus and Voeth (2014) described that the business relationship is influenced by the impact of the advanced investment needed, which results in one-sided or mutual dependence.

This section discusses the basic aspects, including the different classes of business types (Backhaus & Voeth, 2014; Kleinaltenkamp, 2000; H. P. Richter, 2001) and the purchase characteristics (Backhaus & Voeth, 2014; Sheth, 1973). The characterisation and composition of the industrial business customer is also considered (Backhaus & Voeth, 2014; Sheth, 1973; Webster & Wind, 1972), as is the purchasing process (Backhaus &

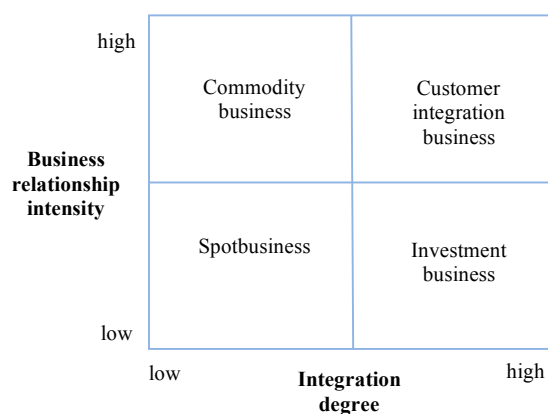
Voeth, 2014; Sheth, 1973; Webster & Wind, 1972) and the nature of the relationship. Moreover, the environmental aspects which influence the behaviour (Ford, 2002b; Webster & Wind, 1972) are reviewed.

The section ends with a summary and a conclusion concerning the industrial business context.

2.2.1 Business types and classes of goods

The concept of segmentation is an established approach for developing an understanding of customer needs. This approach groups a market into segments of customers that react similarly to marketing actions (Oliva, 2012). Backhaus & Voeth (2014) and H. P. Richter (2001) collectively analysed more than 14 industrial B2B segmentation approaches (business type models). H. P. Richter (2001) considered the model created by Backhaus, while Backhaus & Voeth (2014) considered the model of Richter.

One very basic and at the same time essential model is defined by Kleinaltenkamp (2000); also cited by H. P. Richter (2001) and Backhaus & Voeth (2014). This model (see Figure 4) defines four business types by considering on the one hand, the intensity of the business relationship and on the other hand, the integration degree of the external factor, meaning the inclusion of the customer in the performance process.



(Kleinaltenkamp, 2000, p. 604)

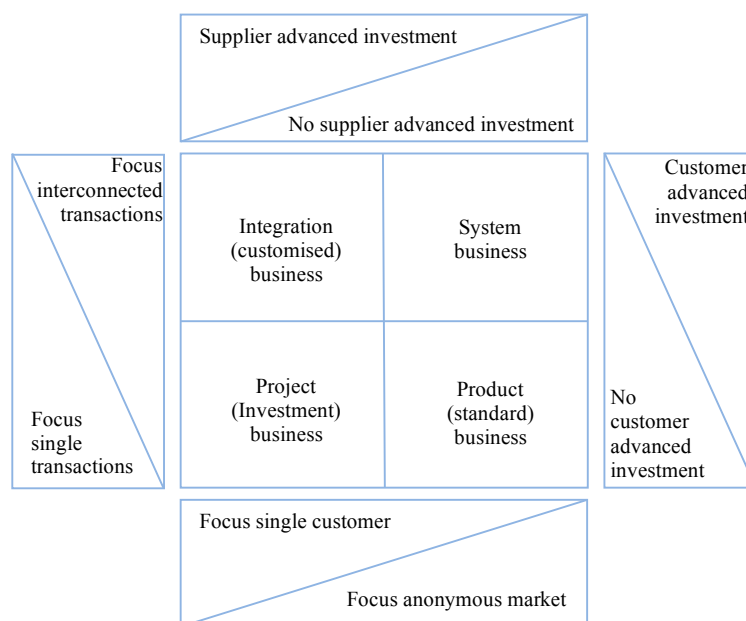
Figure 4: Business typologies

Characterised by a low integration degree and low business relationship intensity, spot business are transactions with highly homogeneous goods, where the replacement of a supplier is problem-free (Kleinaltenkamp, 2000). Commodity business describes

business with homogeneous goods, which are goods produced without or with very low customer participation. On the other hand this business type is characterised by a high business relationship intensity as usage of the goods needs additional services—delivery service, consultation and waste management (Kleinaltenkamp, 2000). Investment business requires a high degree of customer participation. On the other hand, the business relationship is mostly limited to the current business project and the business relationship intensity remains low (Kleinaltenkamp, 2000).

Customer integration business requires a high customer participation due to the high specificity of the performance, which results in high business relationship intensity (Kleinaltenkamp, 2000). The relationship needs to be managed and the understanding of seasonality and the customer’s product development cycle appears to be a premise for success (Oliva, 2012). Backhaus & Voeth (2014) describe this type of business as supplier business, where products are specifically designed for a customer and the customer is forced to execute advanced performance. On the other hand, the supplier also invests time into customer specific performance, which creates a mutual dependence (Backhaus & Voeth, 2014).

Backhaus & Voeth (2014) pick up this dependence issue by considering the degree of advanced performance/investment (customer or supplier), among two other parameters, to classify four business types (see Figure 5):



(Backhaus & Voeth, 2014, p. 217); adapted by author

Figure 5: Business types

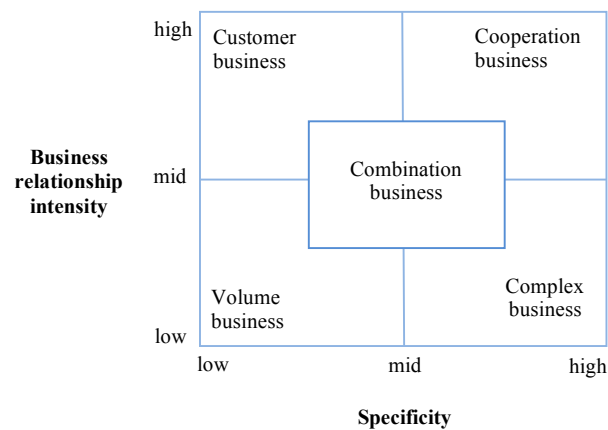
Product business is related to the “spot business” defined by Kleinaltenkamp (2000) and stands for standardised performances, which are sold to a more anonymous market where no interdependence is generated. Neither the customer nor the supplier executes a specific advanced performance. The project business focuses on a single customer, whereby the supplier executes an advanced performance. A further aspect is that the sales sequence is prior to the fabrication. In the system business, products are brought to the market which is a more anonymous market. In this business type the customer executes advanced performance, as the system will be individually set up, will have to be pre-financed and the extension of the system is interdependent on the basic system. The customer is therefore placed into a dependency on the supplier. As described, the integration business demands advanced performance from both sides. A long-term business relationship is therefore created and due to the joint pre-investment a certain mutual dependence occurs (Backhaus & Voeth, 2014).

This model of Backhaus & Voeth (2014) highlights that the nature of the business type can lead to dependence, which influences the risk carried by the parties and therefore will influence their behaviour. On the vertical axis, the business types vary between having focus on a single transaction to having multiple interconnected transactions. The model shows that the higher the focus is on single independent transactions, the lower the advanced investments will be for the customer and therefore also the risk. On the other hand the customer’s risk appears higher for the supply and system business types, which entails multiple dependent transactions. Further, the business types differentiate between having a focus on a single customer or on a more anonymous market. The advanced performance of the supplier is generally higher when focus is on a single customer rather than an entire market segment.

The accomplishment of advanced performance and previous buying decisions, which consequent a following buy, result in economic dependence and therefore incorporate a higher risk for that party (Backhaus & Voeth, 2014). Moreover, the segment’s constellation of external factors influences the interest of a corporation (Scheer, 2012). The type of transaction and the type of market will influence the required marketing (Backhaus & Voeth, 2014).

Similar to the model of Kleinaltenkamp (2000), the business type model of H. P. Richter (2001) sets up the matrix by considering the intensity of the business relationship and

relates the relationship intensity to the realised customer specificity of the performance (see Figure 6).



(H. P. Richter, 2001, p. 155)

Figure 6: Business types of industrial marketing

As with the product business (Backhaus & Voeth, 2014) and spot business (Kleinaltenkamp, 2000), the volume business defines business with largely standardised products (such as standard parts, rolling bearings, computer chips, simple electro motors) or standardised system technology (such as automation components or flexible manufacturing cells) (H. P. Richter, 2001). To note is that no specific performance is realised, no dependence is created and the supplier is largely substitutable (H. P. Richter, 2001).

The customer business is characterised by a higher intensity in business relationships. H. P. Richter (2001) describes the parts traded in this segment to be more complicated; for example, hydraulic systems, pneumatics, modules and NC processing machines. Consistent with the higher complexity, Kleinaltenkamp (cited by H. P. Richter, 2001) describes the requirement for additional services for the related business segment commodity business. Furthermore, H. P. Richter (2001) mentions that the components already tend to be more specific and the higher business relationship intensity requires a higher engagement from the supplier.

Concerning the complex business, which represents the project business (Backhaus & Voeth, 2014), Kleinaltenkamp (2000) and H. P. Richter (2001) describe the need for intensive consultancy to reduce uncertainty. Furthermore, the business requires personal sales efforts and marketing needs to consider the complexity, the high value and the long-term characteristics (continuous support) (H. P. Richter, 2001).

As with the customer integration business defined by Kleinaltenkamp (2000), co-operation business defines business with a high relationship intensity and a high specificity. Co-operative development of parts is accomplished where either both are participating as equal partners or the supplier is exclusively developing a customised part (H. P. Richter, 2001). For this business segment H. P. Richter (2001) recommends focussing on creating a solution and communicating the capabilities, for example, by references and accomplishing customer specific communication. Noticeable is that Hutt & Speh (2004) also describe that for customised manufactured materials, parts and installations, the personal selling seems to be as important as the product itself.

H. P. Richter's (2001) definition of the combination business considers the system technology business, which can extend from complex highly integrated production systems (e.g., computer integrated manufacturing) to systems with high standardisation and customer-specific adaptation. Depending on where the focus is, the marketing may require a more standardised marketing mix or may need personal selling and customer-specific or industrial sector-specific communication (H. P. Richter, 2001). It must be considered that in this segment the customer needs to pre-invest, which increases the risk for the customer (Backhaus & Voeth, 2014).

As partly listed, the presented business types imply a particular cluster of goods. Concerning the type of goods, Hutt & Speh (2004) recommend carefully analysing how the goods enter the production process and how the customer's cost structure is composed, which gives an indication of who is involved and enables the design of an effective marketing strategy.

All three business type models presented here, including the considered models by Backhaus & Voeth (2014) and H. P. Richter (2001), appear to describe three main industrial B2B characteristics (H. P. Richter, 2001). One particular characteristic is the range of specificity of the performance, which starts with standard performance and expands to highly specific performance (H. P. Richter, 2001). The other characteristic relates to the structure of the goods, which covers the range of standard products and systems and ends with accomplishment of co-operative development (H. P. Richter, 2001). The third characteristic describes the relationship, which starts with single transactions and extends to a co-operative business relationship (H. P. Richter, 2001). The

dependency of the business relationship can be one sided or mutual, which is believed to influence the behaviour of the market players and in particular the customer (Backhaus & Voeth, 2014). An existing business relationship can also shift between business types; for example, customer-specific performance can become a standard solution for all customers or markets (Backhaus & Muehlfeld, 2005). A further cause of dependence can also lie in the market dominance of one of the players (Scheer, 2012). Additionally, the type of goods influence the composition of people involved (W. Johnston, J. & Lewin, 1996).

The given market context and the type of traded goods are believed to influence the customer's perspective. In addition, the business customer has certain particularities that need to be considered to understand the industrial context.

2.2.2 The industrial business customer

The industrial business targets a more identified market than the consumer market (J. R. Thomas, 2012; Webster, 1995). Marketers often have a clear idea of their customers and have a clear perspective of their individual role in the market (Ford, 2002b). Moreover, the industrial marketing effort, compared to the consumer marketing effort, is mostly focused on a few customers (J. R. Thomas, 2012; Webster, 1995). It is probable that the transparency of such identified markets enforces communication between the market players and therefore also the mutual knowledge of the players within the market. This condition can be either a chance or a risk to enforce brand equity, as good and poor performance is spread.

Furthermore, industrial businesses are often dependent on upstream and downstream markets. To support its customers, an industrial company should be informed about the needs of its customer's clients and be aware of the chances and risks (Backhaus & Voeth, 2014). The company needs to be aware of the total value chain where it is doing business, as the demand derives through upstream business (Grewal & Lilien, 2012). Moreover, knowing the requirements of the client's customers helps to understand their needs (J. R. Thomas, 2012). In addition, their own performance is dependent on the downstream market, the suppliers. The customer relies on a network of suppliers to add value to their offerings (Anderson et al., 2009).

Apart from this general market structural influence, the organisational characteristics influence the behaviour of the buying centre (W. Johnston, J. & Lewin, 1996; Sheth, 1973; Webster & Wind, 1972).

The size of the customer organisation will influence how it interacts (Backhaus & Voeth, 2014; J. W. Johnston & Chandler, 2012). Large organisations will frequently have guidelines on how to purchase, who is involved in the purchasing decision processes, who decides which methods have to be used and the incentive system that is implemented (Backhaus & Voeth, 2014). The structure of the purchasing organisation has a lot of influence (Backhaus & Voeth, 2014; J. W. Johnston & Chandler, 2012). A peripheral unit normally has the ability to decide up to a certain value of money, but will have to involve headquarters should this limit be exceeded (Backhaus & Voeth, 2014).

The culture of the organisation also influences the decision, as do the values and norms (Backhaus & Voeth, 2014); for example, an organisation can have values of always buying the best or the philosophy of never wanting to fall into a dependency. The purchasing strategy also influences behaviour. Electronic purchasing management is, for example, enforcing global sourcing strategies (Backhaus & Voeth, 2014).

The customer organisation can differ in their purchasing orientation (W. Johnston, J. & Lewin, 1996; Sheth, 1973; Webster & Wind, 1972). A customer organisation with a basic buying orientation—focuses on the best deal in terms of price, quality and availability—mainly executes discrete transactions (single item/purchase) (Anderson et al., 2009). This type maximises the power over the supplier and avoids risk wherever possible (Anderson et al., 2009). The procurement orientation approach seeks to improve productivity by improving quality, reducing total cost of ownership and co-operating with suppliers. This type of group has a strategic approach, is proactive and focuses on total solutions (Anderson et al., 2009). The supply management orientation group recognises that the success of their organisation is linked to other companies in the value network and value the building of long-term relationships (Anderson et al., 2009). This group focuses on delivering value to the end user, considers the core competences and resources of their own company to define a sourcing strategy, is eager to build an efficient supply network and emphasises highly collaborative relationships (Anderson et al., 2009).

These organisational and market position aspects need to be considered to understand the case-specific context and the source of the behaviour. Although these aspects are influential, an organisation ultimately exists from a group of people. The group of people involved in the purchasing process is defined as the buying centre or the decision-making unit (Backhaus & Voeth, 2014).

The buying centre is normally not institutionalised and can be formed informally (Hutt & Speh, 2004). Nevertheless, it is crucial to know who is part of the buying centre (Anderson et al., 2009). Besides actually knowing which persons are involved, it is important to know what function and roll they have in the organisation (Backhaus & Voeth, 2014). In addition, buying behaviour studies have found that the purchase situation influences structure and involvement of the buying centre (Lewin & Donthu, 2005). According to Howard & Doyle (2006), the purchasing orientation also influences the composition of the buying centre.

Concerning the structure, the size of the buying centre appears to vary depending on the specificity of the purchased performance (H. P. Richter, 2001). For highly standardised performance, possibly only the purchasing person will be involved (H. P. Richter, 2001). Equally, on the supplier side the selling centre will vary in size depending on the specificity. For standard solutions, typically only the salesperson will be involved (H. P. Richter, 2001). Larger buying centres tend to be more formalised and follow predetermined guidelines and methods (Backhaus & Voeth, 2014). The buying centre members generally differ in their hierarchical status, expert knowledge and way of deciding and receiving information. They will also differ in their psycho and social culture and demographic factors (H. P. Richter, 2001).

To characterise the members of the buying centre, different criteria can be considered. Backhaus & Voeth (2014) see the classification of the person itself, the function and the role as the most sensible.

To address a person, knowledge of their actual name is required. The individual person seems to have more influence depending on how strongly they are affected by the purchase and the person's individual experience (Ghingold & Wilson, cited by Backhaus & Voeth, 2007). Consistent with this statement, Osmonbekov, Bello & Gilliland (2002) suggest that the active participation of a buying center member is one of the key structural

aspects of a buying centre. Knowing the degree of management involvement and knowing the number of departments allow effective management of marketing efforts (Lewin & Donthu, 2005).

The function gives an indication of what the member is responsible for (Backhaus & Voeth, 2014). The function of the person will also provide an indication in what the person is interested (Osmonbekov et al., 2002). For example, engineering personnel will have a different perspective than production personnel (Keller & Webster, 2004). An engineer is primarily focused on maximising performance, while production personnel are mainly concerned with the ease of use and reliability of supply (Keller & Webster, 2004).

Besides the business function, members of the buying centre have certain roles within the group (Webster & Wind, 1972). The role is independent from the person and is defined through position in the organisation (Backhaus & Voeth, 2014). The role concept of Webster and Wind (1972) divides the group into the buyer, the decider, the user, the gatekeeper and the influencer. Influencers do not take part in the formal decision process, but nonetheless influence the process by defining guidelines or communicating their opinion. The gatekeeper controls the flow of information and can therefore influence what information is considered (Anderson et al., 2009). The decider has the final decision. The hierarchical level of the buying centre member appears to determine what information is considered and at which decision stage the member participates (Osmonbekov et al., 2002). The buyer is normally part of the purchasing department, chooses the supplier and completes the purchase contracts (Webster & Wind, 1972). An awareness of the different roles assists in defining the role conform behaviour, which helps sales to positively influence the purchasing process (Backhaus & Voeth, 2014).

It is important to know how individuals behave during the buying process and also that the composition of the buying centre evolves during the purchasing process (Hutt & Speh, 2004). The interest of the members and group dynamics also need to be considered (Backhaus & Voeth, 2014; Webster & Wind, 1972). Are they looking for commercial or technical information and to what extent do they need information? What criteria influence their decision behaviour? Do they decide rationally or emotionally? What is the procedure when the buying centre cannot come to a decision due to different opinions? (Backhaus & Voeth, 2014) According to Osmonbekov et al., (2002) conflicts arise

through diverging department objectives, task interdependence and incompatible management approaches. The individual's (decider, influencer) influence needs to be considered and whether the relationship among the buying centre members is formal or informal (Backhaus & Voeth, 2014; Webster & Wind, 1972).

“The multi personality, purchase regimes, division of labour, individuality and power decision of the involved people call for a special kind of information and decision-making behaviour, the organisational buying behaviour.” (H. P. Richter, 2001, p. 76)

Marketing is required to account for all of these different needs and adequately assemble coherent performance and communication (Hutt & Speh, 2004). An understanding of the buying centre members' basic values requires detailed analysis (Keller & Webster, 2004). Each of the involved individuals have a function in the organisation and individual experiences, which need to be considered (Voeth & Brinkmann, 2004).

Besides the different perspectives that need to be considered, the purchase characteristics will influence the behaviour of the customer and also the composition of the buying centre.

2.2.3 Purchase characteristics

The organisation's buying behavior is influenced by the product type (see Section 2.2.1), the buy type, the uncertainty of the purchase, the complexity, the time pressure for the purchase and the importance of the purchase (W. Johnston, J. & Lewin, 1996).

Robinson, Farris & Wind, define three buying types: the “new task”, a “straight re-buy” and a “modified re-buy” (cited by Srinivasan, 2012). When the purchase is for a new task, the purchasing department will normally spend a lot of time gathering information about possible options and possible suppliers (Hutt & Speh, 2004). The more novel a purchase, the more departments and management levels become involved (W. J. Johnston & Bonoma, 1981). Purchases with greater cost and risk require a larger buying centre, more extensive collection of information and the buying decision will take longer (Srinivasan, 2012). Nevertheless, it is rare that a significant purchase will be accomplished when no one of the buying centre has any experience with the type of goods or the supplier company (Grewal et al., 2015). As investments do not occur on an everyday basis, this

type of buy is frequently accomplished in the investment type business (Srinivasan, 2012).

During a straight re-buy the possible suppliers are known, the organisation normally has a well verified list of criteria and the decision for the supplier is taken promptly (Srinivasan, 2012). On the other hand, an identical re-buy only occurs after previously negotiated buying arrangements are confirmed, as a change in supplier will result in modifications; without a contract, modifications with a present supplier are also possible (Grewal et al., 2015). A modified re-buy occurs when the organisation is not satisfied with the current solution (Srinivasan, 2012). This can involve quality, cost or unsatisfactory performance of the current supplier (Anderson et al., 2009; Hutt & Speh, 2004). On the other hand, changes in the buying firm (for example, new strategic focus that results in the need to adapt a product) can also lead to modifications (Grewal et al., 2015). Alternatively, the customer simply strives to reduce the cost of its offering and therefore requires changes within the suppliers offering (Oliva, 2012).

In the buy-grid framework of Robinson, Farris & Wind, the defined buy types are placed in the context of the buying process (cited by Srinivasan, 2012), which is discussed in the following section.

Uncertainty is related to the perceived risk (Webster & Wind, 1972). The more that is unknown, the longer the process will take and the number of members of the buying centre will increase (Anderson et al., 2009; Backhaus & Voeth, 2014). According to Donald, three kinds of uncertainty are significant: “uncertainty about available alternatives; uncertainty about the outcomes associated with various alternatives; and uncertainty about the way relevant other persons will react to various outcomes.” (cited by Webster & Wind, 1972, p. 19)

The complexity of the purchase is dependent on the product complexity (W. Johnston, J. & Lewin, 1996). Depending on the maturity of the product technology, the purchasing person will assume a purely administrative role and the engineering department will become more influential (Backhaus & Voeth, 2014). The higher the complexity, the more departments and management levels become involved (W. J. Johnston & Bonoma, 1981).

The relative importance of the purchase also influences the composition of the buying centre (W. J. Johnston & Bonoma, 1981; Lewin & Donthu, 2005). For example, the higher the relative value of the purchase is, the more people are involved and the longer the process takes (Backhaus & Voeth, 2014). The perceived risk also increases with the time pressure (W. Johnston, J. & Lewin, 1996), which is possibly driven by the derived demand in the B2B context.

The characteristics of the purchase therefore determine the people involved during the buying process and have an influence on the procedure of the process and the general buying behaviour. In the following section, the purchasing process and its particularities are discussed in more detail.

2.2.4 Purchasing process

The purchasing process is normally formalised in an industrial B2B setting (Backhaus & Voeth, 2014). In some cases the process can take months and involve many meetings (Ford, 2002b).

According to the categorisation of Lilien and Wong (1984), several phase concepts try to conceptualise the buying processes in industrial markets. H. P. Richter (2001), Backhaus & Günter (cited by Backhaus & Voeth, 2014), Sheth (1973), Webster (1972), and Robinson et al. (cited by W. Johnston, J. & Lewin, 1996) all describe process stages of the buying process.

The main difference of the defined phase concepts lies in the degree of detail (Backhaus & Voeth, 2014). One commonly identified phase is the recognition of a problem (Lilien & Wong, 1984), which results from the constantly changing corporate environment (H. P. Richter, 2001). This initial phase is generally initiated by the customer organisation; nonetheless, it can also be initiated through a cross selling activity by an existing supplier or can even be initiated by a third party (for example, a consulting engineer) (H. P. Richter, 2001). This can apply for a “new task” or a “modified re-buy” (Srinivasan, 2012). H. P. Richter’s (2001) phase concept describes a detailed and comprehensive purchasing process. Backhaus & Günter (cited by Backhaus & Voeth, 2014) describe a more comprehensive approach and summarise the first phases under a defined pre-request phase, which concerns problem recognition, possibly pre-studies and the evaluation of a possible execution. H. P. Richter (2001) divides this area of activities into a conception

phase, information phase and request phase. During the conception phase, the actual purchase intention is questioned and a final decision is taken (H. P. Richter, 2001). The information phase is about evaluating suitable offers and minimising the purchasing risks in order to avoid bad decisions and avoid discrepancies between the required and realised performance (H. P. Richter, 2001). The request phase implies contacting some preselected suppliers and, depending on the specificity, includes qualifying technical tests, a clarification of the requirements and a specification of the performance (H. P. Richter, 2001). According to Backhaus & Günter (cited by Backhaus & Voeth, 2014), the next basic phase is the “provide offer phase”, during which the customer is contacted to clarify further details and the offer is sent. Of note, the supplier needs to determine the profitability and inherent risk of the potential business, which will influence if an offer is actually accomplished and sent (H. P. Richter, 2001). The received offer is assessed and the range of suitable suppliers is further reduced (H. P. Richter, 2001). After the negotiation phase, the order is placed (Backhaus & Günter, cited by Backhaus & Voeth, 2014). The negotiation phase, which H. P. Richter (2001) divides into a valuation and a decision phase, includes intervals that the potential customer uses to review the offer and or accomplishes negotiations with competitors (H. P. Richter, 2001). The execution phase then starts, during which the delivery of supply and an approval is accomplished (Backhaus & Günter, cited by Backhaus & Voeth, 2014; H. P. Richter, 2001). For industrial investment goods, the project phase for implementation will subsequently start and the warranty phase begins after the handover to the customer (Backhaus & Günter, cited by Backhaus & Voeth, 2014). Otherwise, the product is simply purchased and the warranty phase will start directly. During the warranty phase the customer realises the problem-solving and process handling abilities of the supplier (H. P. Richter, 2001). Within the buy-grid framework, Robinson et al. (cited by W. Johnston, J. & Lewin, 1996) describe this last phase as the performance review phase, in which the buyer periodically reviews the performance of the supplier that then leads the buyer to continue, modify or terminate the relationship.

These main purchasing phases provide a good overview of the process. Nonetheless, it also needs to be considered that processes vary depending on the purchase characteristics (W. Johnston, J. & Lewin, 1996; Srinivasan, 2012) and the business type (Backhaus & Voeth, 2014).

Independent of the phases, the frequently high values of industrial goods and the solutions needed often go beyond the technical solution (Backhaus & Voeth, 2014). In particular, complex products and their integration often need previous consultancy and many of the products need maintenance, which the customer is not always capable of doing (Gupta, Melewar, & Bourlakis, 2010). Therefore, the customer also needs to consider the service support of the supplier and the supplier has to ensure a positive purchase and post-purchase experience (Gupta et al., 2010).

Another aspect to consider is that the influence that the buying centre members have vary during the different phases (Hutt & Speh, 2004). In a study by Garrido-Samaniego & Gutiérrez-Cillán (2004), the engineering and manufacturing business functions have more influence during the establishment of the specifications. During the supplier search, engineering and purchasing have the most influence and during vendor evaluation engineering and manufacturing again have the most influence (Garrido-Samaniego & Gutiérrez-Cillán, 2004). For supplier selection, the purchasing, engineering and management functions have the most influence (Garrido-Samaniego & Gutiérrez-Cillán, 2004). The differing influence, depending on the phases of the process, is also observed by Lilien & Wong (1984). According to Lilien & Wong (1984), engineering and purchasing influence the process at the beginning, whereas purchasing and production dominate during the middle phase; at the end, corporate management, purchasing and production influence the final decision.

Hence, there are different phases during a buying decision, which also indicate that marketing problems can vary during the process (Backhaus & Voeth, 2014). Furthermore, suppliers need to consider the changing functional roles and their different perspectives during the process (Garrido-Samaniego & Gutiérrez-Cillán, 2004).

Therefore, the task of marketing in an industrial context is the product-specific coordination of company performances (R&D, purchase, production, sales, etc.) towards the requirements of the business market (Backhaus & Voeth, 2014). Additionally, the company performance is accomplished by an organisational group with different functional roles, which interact with other functions on the customer side (Hutt, Johnston, & Ronchetto Jr, 1985). This interaction results in many contact points between the two groups that should be coordinated (Backhaus & Voeth, 2014).

The successful coordination of the groups also needs the consideration of the environment (Backhaus & Voeth, 2014) and has on its own different aspects that need to be taken into account.

2.2.5 Environment

The political influence and the legal, cultural, global, technological, physical (geographic, climate or ecological) and economical aspects, as well as the behaviour of the suppliers and competitors, are environmental factors that influence an organisation's purchasing behaviour (W. Johnston, J. & Lewin, 1996).

Temporary economic conditions can be foreign trade, price changes, general ad-hoc changes in the market place or times of recession (Sheth, 1973). Purchasing seems to be more regulated during times of recession than during times of economic growth (Guillet de Monthoux, cited by Hutt & Speh, 2004). The tendency toward internationalisation of markets also enforces actions towards foreign countries or limits activities to the local market (IMP-Group, 2002). Another aspect is the number of participating members (competition, suppliers) and the rate of change in the market (IMP-Group, 2002). These aspects limit or increase the alternatives to any market player (IMP-Group, 2002). Additionally, the dynamism of the market may enhance a close partnership with one market player or enforce the need to keep several contacts active (IMP-Group, 2002).

Interrelated with the legal and political aspects are the regulations that products and companies must fulfil in order to take part in the market (Backhaus & Voeth, 2014). Country- or application-specific regulations can lead to market barriers for newcomers, as fulfilment of the regulations requires a certain investment. On the other hand, the guiding norms are influenced by culture (Webster & Wind, 1972). The social system of the market can also influence how foreign brands are perceived with regard to experience and ability to follow regulations (IMP-Group, 2002).

Technological developments influence the competition in the market. The market players need to consider the compatibility of the interface to existing technology and the future development of technology (Backhaus & Voeth, 2014). Furthermore, technological development influences how organisations purchase. For example, purchasing is to a large extent moving towards an online process, whereby on some occasions the complete process is accomplished online (Backhaus & Voeth, 2014). Osmonbekov et al. (2002)

state that the implementation of e-commerce alters the structure of the buying centres (decreases size, number of hierarchical levels and functional areas, but increases individual buying centre member participation), influences the purchasing process (increases influence of technical personnel, decreases conflict between buying centre members and increases coordination between buying centre members) and increases purchasing efficiency and task effectiveness.

In addition to the outlined aspects, the individual position in the manufacturing channel influences the marketing strategy and the relative position influences the characterisation of the relationship towards the other parties (IMP-Group, 2002). These relationship characteristics are discussed in Section 2.2.6.

2.2.6 Customer-supplier relationship

As previously mentioned while discussing the models of the different business types of H. P. Richter (2001) and Kleinaltenkamp (2000), the intensity of the business relationship is a crucial value in a B2B context. H. P. Richter (2001) examined the relationship intensity in relation to the specificity of the realised performance. Kleinaltenkamp (2000) relates the relationship intensity in comparison to the required external factor to create the performance.

Backhaus & Voeth (2014) conclude that the business relationship is influenced by the impact of the advanced investment needed, which results in one-sided or mutual dependence. Out of a process perspective, the relationship can be described by five stages; the pre-relationship stage, the early stage, the development stage, the long-term stage and the final stage (Ford, 1980). The relationship is seen as a process, which is characterised by increasing experience, reduction in uncertainty and distance, growth of actual and perceived commitment, formal and informal adaptations and an increase of investments and savings (Ford, 1980).

The pre-relationship stage is about the evaluation of a new potential supplier (Ford, 1980). The evaluation is conditioned by experience with previous suppliers, the uncertainty about the potential relationship, the perceived commitment and the distance to the supplier (Ford, 1980). At the early stage, during negotiation and sample delivery, the experience is low and the uncertainty and the distance is high (Ford, 1980). The invested management time stands opposite to the few cost savings (Ford, 1980). Therefore in the

short-term the exchange of product and services, information, financial exchange and social exchange affect the relationship (IMP-Group, 2002).

At the development stage, the contract is signed or delivery is built up. The long-term stage is defined by having accomplished several major purchases or large-scale deliveries (Ford, 1980). During the process, the experience increases while the uncertainty and distance are reduced to a minimum (Ford, 1980). Adaptations in product, financial arrangements, information routines and social relations influence the relationship in the long-term (IMP-Group, 2002). The adaptations of formal and informal aspects increase during the process, which lead to an increase in cost savings (Ford, 1980). The actual commitment is increased up to a maximum, while the perceived commitment is demonstrated by informal adaptations and will demise throughout the process (Ford, 1980). At the final stage, in long-established stable markets, the relationship is embossed by extensive institutionalisation and business is based on industry codes of practice (Ford, 1980).

Apart from these relationship stages, it must be acknowledged that the buying process is not only about an action and reaction of the two parties, it is also about interaction (Ford, 2002b). The buyer and the seller are active participants in the market looking for the best solution (IMP-Group, 2002). In some situations the customer is the active party looking for a supplier to solve a specific need (Ford, 2002b).

The activities between the parties and the expectations evolve to become institutionalised in the long-term. This can lead to conflict or co-operation (IMP-Group, 2002). A long-term relationship has the tendency to grow closer, but will need effort to maintain it (IMP-Group, 2002).

The atmosphere of the relationship is characterised by the power dependence, co-operation, closeness and expectations (IMP-Group, 2002). The process of the relationship is also influenced by the character of the parties themselves (IMP-Group, 2002). One aspect is the fit of the utilised technology and the interrelated expertise of the parties. A gap in technology or a gap in expertise between the parties can prevent a business relationship or a further increase in business (IMP-Group, 2002). The size, structure and strategy of the organisation influence possible relationships. The fit of the strategy has to be given to a certain extent to justify the investment (IMP-Group, 2002). In addition, the

organisation's experience with relationships (for example, with international parties) affects the way a relationship develops. Finally, yet importantly, the individuals influence the relationship by their individual behaviours, aims and experiences (IMP-Group, 2002).

Organisations and individuals create and develop a variety of relationships, which form a network (Johanson & Mattsson, 2002). Such a network is interrelated and management of the individual relationships cannot be treated in isolation (Johanson & Mattsson, 2002). Furthermore, such a network offers possibilities to exploit the relationships of existing direct relationships (Johanson & Mattsson, 2002).

From a conceptual viewpoint, a network exists due to the actors that control the activities and/or resources (Håkansson & Johanson, 2002). These actors (for example, organisation, buying centre/members) perform and control activities and develop relationships through an exchange process and the individual/joint access to resources (Håkansson & Johanson, 2002). Furthermore, the actors are goal oriented and emphasise control over the network to achieve their goals (Håkansson & Johanson, 2002). Control of the network is reached by controlling resources and or activities, whereby control of activities is a matter of control over resources and of knowledge (Håkansson & Johanson, 2002). The network is formed out of a combination of these individual relationship patterns of activity, a web of actors and the constellation of resources (Håkansson & Snehota, 2002a).

In summary, through the interactive process, relationships are built and promoted by both parties in which technical, social and economic issues are handled (Ford, 2002b). Relationships are connected in various ways and can only be fully understood by knowing the context. "Through relationships, economic benefits can be captured by technical, administrative, or temporal connections." (Håkansson & Snehota, 2002b, p. 41) Hence, "relationships in the business markets are often close and enduring" (Hutt & Speh, 2004, p. 13). Moreover, the business parties need to recognise that they are in the middle of a complex network that incorporates a large potential for the one that exploits the opportunities (Ford, 2002a). Companies are increasingly dependent on the abilities and technology of others, which are exploited in relationships and are also developed interactively in them (Ford, 2002a). In this regard the IMP Group suggests to realise a strategy of anticipation, accommodation, action, reaction and re-reaction (Ford, 2002a).

2.2.7 Conclusion to the industrial business context

Emphasis on the relationship intensity is noticeable, which appears to vary among the business types (Kleinaltenkamp, 2000; H. P. Richter, 2001).

The relationship intensity is dependent on the specificity of the performance, which reaches from a standard to a specific designed performance (H. P. Richter, 2001). Also, customer participation in creating the goods influences the intensity of the business relationship (Kleinaltenkamp, 2000). The relationship between the organisations range from a single transaction to a co-operative relationship (H. P. Richter, 2001). Backhaus & Voeth (2014) explain that due to the characteristics of the industrial business types, dependencies can accrue between the parties. Depending on the business type, the risk carried by pre-investing in a potential business is either mutual or unequally distributed. In general, the atmosphere of the relationship is characterised by power dependence, co-operation, closeness and expectations (IMP-Group, 2002).

In relation to the dependency, when a demand is a derived demand (Backhaus & Voeth, 2014; Hutt & Speh, 2004), the customer “has” to buy and the choice is merely about “where” to buy. This necessity in combination with a shortage of particular goods or a limited number of possible suppliers influences the behaviour and relationship of the market players (IMP-Group, 2002). Furthermore, the largely identified markets influence the awareness of market participants (Ford, 2002b), which is seen to enforce a stronger correlation between the image and the actual authentic performance.

As recognised by H. P. Richter (2001), Kleinaltenkamp (2000) and Backhaus & Voeth (2014), the relationship has a decisive role in business to business. The IMP Group appears to be one of the first to have focused on examining the nature of the customer-supplier relationship and were able to uncover some interesting characteristics (Ford, 1980).

The business relationship with its inherent phases and the included buying process are not only about an action and reaction of the two parties, it is also about interaction (Ford, 2002b). It needs to be considered that in the beginning the relationship is defined by delivery of information, products, services, money and the first social interactions, which play a major role (IMP-Group, 2002). In the long-term the interdependence of the relationship is fostered by accomplished product, organisational adaptations and the

evolved social relations (IMP-Group, 2002). These often close and enduring business relationships (Hutt & Speh, 2004) need to be cared for (IMP-Group, 2002); as resources are limited, business relationships need to be prioritised (Håkansson & Snehota, 2002a). Organisations create and develop a variety of relationships that form a network (Johanson & Mattsson, 2002). Each of the actors in the network aim to attain control of the network, which is achieved by controlling the resources, activities and knowledge (Håkansson & Johanson, 2002). Of note is that companies are becoming increasingly dependent on the abilities and technology of their network (Ford, 2002a) and therefore the company's action is dependent on the surrounding network (Ford & Hakansson, 2006).

The context of the network themes, the relationship intensity, the interaction, the specificity of performance, the degree of involvement of the customer and the different dependencies (pre-investment or technology) among the parties are seen to form the expectations of the customer and, in accordance, influence the customer's perspectives of which brand associations are beneficial.

Apart from the network and the direct supplier customer relation, the characteristics of the customer themselves influences the customer's perception. The customer is represented by the different members of the buying centre, which decide where to buy (Hutt & Speh, 2004). It therefore seems crucial to understand the perspectives of the members in order to understand customer-based brand equity. These perspectives are influenced by the characteristics of an organisation and the accompanied division of work, which requires expert knowledge and functional roles (Backhaus & Voeth, 2014). The person themselves bring in their individual experience and become affected by the purchase (Ghingold & Wilson, cited by Backhaus & Voeth, 2014). Besides the distribution of the buying centre, the culture of the organisation and the corresponding values influence the perspective of the buying centre (W. Johnston, J. & Lewin, 1996). Additionally, the size of an organisation influences the number of people involved in the process and the formality in which the buying centre proceeds. The buying process appears to be more formal within larger organisations (W. J. Johnston & Bonoma, 1981; H. P. Richter, 2001).

Within the buyer-supplier relationship the purchasing process appears to have some distinct phases (Backhaus & Günter cited by Backhaus & Voeth, 2014; Robinson et al. cited by W. Johnston, J. & Lewin, 1996; H. P. Richter, 2001; Sheth, 1973; Webster & Wind, 1972) in which the influence of the buying centre members seems to vary (Garrido-

Samaniego & Gutiérrez-Cillán, 2004). Nonetheless, the process can also vary depending on the purchase characteristics (W. Johnston, J. & Lewin, 1996; Srinivasan, 2012) and the business type (Backhaus & Voeth, 2014). Additionally, the composition of the buying centre can vary depending on the purchase characteristics; for example, the relative importance, complexity and the type of buy (W. Johnston, J. & Lewin, 1996). A new buy, a modified buy and a re-buy can also be seen as a sequence of buy types within a business relationship (Grewal et al., 2015). Moreover, the purchasing process is only one part of the buyer-supplier relationship (Ford, 2002b).

The context and the phase-dependent multiple perspectives appear to be very challenging. Nevertheless, consideration of these varying perspectives and the aligned management of the performance and communication seem important and necessary to ensure long-term success (Hutt & Speh, 2004). Each individual member influences the development of the business relationship through individual experience and behaviour (IMP-Group, 2002). Moreover, the mostly long-term, close and interactive (Ford, 2002b) relationships call for enduring effort to ensure co-operation and manage expectations (IMP-Group, 2002).

It is acknowledged that both parties, to be successful and accomplish their upcoming task, look for suitable partners (IMP-Group, 2002). Potential customers perceive potential suppliers through network actors and also their own network, which bears large opportunities to exploit (Ford, 2002a).

In conclusion, the aspects that influence the perspectives of the industrial business customer are multifaceted. Interestingly, and somehow suitable to the complex situation, is that Hutt & Speh (2004) state that during the industrial buying process, the price is frequently unimportant. Focus is placed on evaluation of the quality, physical entity and services (Hutt & Speh, 2004).

These findings of the various facets in the industrial context represent the second pillar of the research project. The aim of the following section is to evaluate the current state of knowledge concerning brand equity in the industrial and B2B contexts.

2.3 Brand equity in B2B and industrial markets

B2B brand and brand management are emerging topics in science and praxis (Baumgarth, 2010) and the amount of literature towards branding topics in B2B markets is increasing (Keränen et al., 2012). Nevertheless, literature remains fairly limited as most research is not rooted in the B2B context (Keränen et al., 2012). The following review concentrates on what literature has uncovered concerning what B2B customers—specifically industrial customers—perceive and what aspects they value. Literature that intends to grasp the customer's viewpoint (brand image) has been particularly considered. Nevertheless, literature containing brand statements about brand identity has been analysed and also the explanations of brand owners towards their success have been considered. These are also seen as valuable for gaining an overview of the existing knowledge towards customer-based brand equity.

Representing the underlying source of brand equity, the review starts by describing the insights concerning the particularities of the brand's function in a B2B context. To ensure a consistent review and the distinctness of the allocation of the discussed topics, the review follows the structure of the brand equity construct outlined in Section 2.1.4. Therefore, the review starts with the status of knowledge concerning brand awareness, which represents the first stage of the process. The review proceeds by covering the area of brand associations and the facets of brand image/identity in stage two. Further, the aspects concerning brand resonance, loyalty etc. is examined, which represent the third and final stage. The review proceeds by covering some influential contextual aspects and ends with a summary and conclusion about the collected material.

2.3.1 Particular B2B brand functions

The reduction in information costs, risk reduction and the imaginary benefit are basic brand functions that are independent of the B2B or B2C market (Caspar et al., 2002). As in the B2C market, the relevance of the functions varies depending on the product market (Caspar et al., 2002); the brand functions also create trust (Michell, King, & Reast, 2001), confidence and comfort (Kotler & Pfoertsch, 2006). However, the consumer in the B2C market will normally not be confronted with buying decisions that involve the same degree of complexity (Keller, 2013). The basic brand functions have some distinct B2B characteristics given the particularities of the B2B market. The long-term relationship in B2B markets (see Section 2.2.6) fosters the preference for continuity, which is associated with a strong brand (Wünsche, 2010). Furthermore, a brand can help harmonise the

different perspectives (see Section 2.2.2) of the buying centre (Wünsche, 2010). Therefore the effort and the time invested in a decision is reduced (Wünsche, 2010), which is advantageous in business since efficiency is a crucial factor for profitability and competitiveness. The main function in the B2B market is noticeably the reduction of risk (Caspar et al., 2002). As mentioned in Section 2.1.1, self-expressed values do not seem to be as relevant in a B2B context as in a B2C context; nevertheless, the chosen brand is perceived by the organisation (Caspar et al., 2002), influences how the organisation perceives the buying centre members and therefore also influences their self-perception (Kotler & Pfoertsch, 2006).

The brand functions represent the underlying drivers for brand equity as brand awareness, aspects of brand associations and brand resonance. In the following section, the identified aspects of brand awareness in a B2B market are outlined.

2.3.2 Brand awareness

As described earlier, brand awareness is about the strength of the brand's presence in the consumer's mind (D. A. Aaker, 1996) and represents the foundation of brand equity (see Section 2.1.4). In a B2B context there seems to be some particularly effective ways to generate awareness. Research has discovered that straight awareness induces particular associations and can lead to certain behaviours.

Bendixen, Bukasa & Abratt (2004) conducted an exploration for the indoor medium-voltage circuit breaker panel, an item that is widely used by various industries. These authors state that the best approach to generating B2B brand awareness is for technical consultants to talk to potential customers about the new brand. The second best approach is the customer's contact with sales representatives, followed by professional/technical conferences. Mass media is the least relevant approach. Therefore the most effective approach is face-to-face contact. Besides the general influential means, Bendixen et al. (2004) also identify a business function-specific preference as the purchasing function preferred exhibitions. Nevertheless, exhibitions are about face-to-face contact with sales representatives. The most effective approach is explainable since the business relationship is characterised by the closeness and interaction (see Section 2.2.6).

Brand awareness itself has some advantageous effects. A couple of research projects have discovered that the higher the awareness, the higher is the preference for the brand (Yoon

& Kijewski, 1996); additionally, the higher the willingness to pay a price premium (Persson, 2010), recommend the brand and consider other products of the same brand (Hutton, 1997). Alexander, Bick, Abratt & Bendixen (2009), who conducted an experiment in the industrial tyres market for mining operations with the buying centre of open-pit mining companies, state that as the consequences of product failure are high, the willingness to pay a price premium is driven by the reduced risk associated with a well known brand. Accordingly, Schmitt (2011), who conducted a wide empirical study in the machine, electro, chemistry and the automotive industry, states that brand awareness partly influences the two brand functions—reduction of the perceived risk and the savings of information costs—that influence the willingness to buy and pay.

Only the straight brand awareness seems to have a beneficial influence on the behaviour of the customer. One explanation, according to the research of Alexander et al. (2009), is that a high brand awareness seems to be interrelated with the association of quality. This interrelation is supported by research of Gordon, Calantone & Benedetto (1993), who identified that the visibility of the brand label during a product launch had an influence on the perception of quality. The label normally includes the corporate brand name, which is also seen to be more relevant than the product brand (Kuhn et al., 2008).

These findings show that brand awareness on its own has a positive effect on market success (Davis, Golicic, & Marquardt, 2008; Christian Homburg, Klarmann, & Schmitt, 2010) and is generated by approaches that are personal and interactive. There seems to be business function-specific preferences concerning the means through which the brand is perceived. As mentioned, brand awareness is the premise for the generation of brand associations, whereby brand awareness itself can lead to particular brand associations; for example, the perception of quality. The different aspects of brand associations are studied in the following section.

2.3.3 Brand associations

As discussed during the review of the leading brand equity concepts, the area of brand associations has a variety of subcategories. Some of the B2B research has been orientated towards the known concepts, while others have investigated the particularities of a specific subtopic. Nonetheless, other established B2B brand equity literature has developed constructs out of the B2B context.

Kuhn et al. (2008) evaluated Keller's customer-based brand equity pyramid in a waste tracking product market context, which resulted in several adaptations in the compilation of the pyramid. Nonetheless, some aspects are identified as being similar. Table 4 shows the customer response to what factors were most favourable and which factors were identified as important concerning the company.

Table 4: Important association factors

Question	Most important factors	Important factors
Most favourable aspects? (open-ended question)	-System usability -Simplicity -Cost/price	-System reliability / dependability -Compatibility with existing systems -Flexibility -Reporting functionality
Company aspects?	-Technology/system is proven	-After-sales service and support -Stability of the company

(Kuhn et al., 2008, p. 48)

The frequently relevant associations mainly refer to the brand performance category and all of the factors are found to concentrate on product aspects. Kuhn et al. (2008) discovered that the main, relevant imagery aspect is about the reputation of the brand. The investigation concerning the feelings and brand resonance uncovered that these aspects seem irrelevant. Nevertheless, the relationship with the sales force and other departments seems to be influential on the customer's perception, which is discussed in the following section. The result that feelings are not relevant seems incoherent with the general statement that one of the main brand functions is risk reduction (Caspar et al., 2002; Schmitt, 2011) and that Keller's description of feelings includes the aspect of feeling safe when the brand response is seen as honest (see Section 2.1.3). It is therefore assumed that the B2B brand gives a feeling of safety (Keller, 2010).

The identified factors disclose that product associations are dominant aspects. The aspects concerning the company are mainly about indicators concerning the longevity of the supplier and the proof that the supplier is available, in the case that help is needed (Kuhn et al., 2008). The customer values being able to count on a brand. The results of Persson (2010), who explored the corrugated packaging product market, confirms this aspect and, additionally, offers a more refined overview of relevant factors.

Persson (2010) investigated what brand image elements have an influence on paying a price premium (see Table 5). Apart from brand familiarity (awareness), Persson identified five main dimensions.

Table 5: Brand determinants of price premium

Product solution	Service	Distribution	Relationship	Company
-Quality -Assortment -Innovation -Total solution -Customisation -Value-in-use	-Augmented service offerings: -Prior to purchase -After-sales support -Expertise and advice	-Reliable deliveries -Speedy deliveries -Ease of ordering	-Trustworthiness -Perceived commitment -Responsiveness -Adaptations -Co-operation -Information exchange	-Leadership -Management -Community -Personality

(Persson, 2010, p. 1273)

The add-on “solution” of the dimension product solution emphasises the importance of perceiving a solution and not only a product (Persson, 2010). Further, the elements of the product solution dimension offer supplementary product aspects, in comparison to the product aspects of Kuhn et al. (2008). Kuhn et al. (2008) present the service aspect as one factor, while Persson (2010) defines the service aspect as one of the main brand image dimensions. Furthermore, the distribution dimension does not appear in the list of the important association factors of Kuhn et al. (2008). A possible explanation seems to lie in the characteristics of the product type. Kuhn et al. (2008) investigated the factors in relation to electronic waste tracking systems, which appear to not be frequently purchased by the same customer. Persson (2010) on the other hand developed the image dimensions by interviewing customers from a corrugated packaging company. Another difference is found in the relationship aspect. Kuhn et al. (2008) merely mention some relationship aspects and state that brand resonance appears to have no relevance. This corresponds to the description of Kleinaltenkamp (2000) and H. P. Richter (2001) who allot a low relationship intensity to the investment business. Persson (2010), on the other hand, sees the aspect as an own dimension, which seems to be influenced by the aspect that the relationship in the corrugated packaging purchasing is much more interactive owing to the frequent need to re-buy and the need of customer-specific adaptation for such packaging.

Nonetheless, K. L. Keller & Webster (2004) mention the relationship elements of trustworthiness, likeability and ease of doing business as relevant brand intangibles,

independent of the buy type. These aspects are confirmed by Aspara & Tikkanen (2008) who state that the perception of the intentions as a partner and being able to co-operate with customers is also considered to be important. Additionally, Willrodt (2004) mentions the “transaction atmosphere”, which describes the sympathy, the sense of belonging and the respect for the same values, as one of the brand competences.

Overall, the identified dimensions of Persson (2010) also have a high focus on product aspects as, besides the product solution dimension, the service for the product and the distribution of the product are defined. Nevertheless, there seems to be a different focus of the elements, which seem to be influenced by the type of business or type of buy. Moreover, the definition of a straight relationship dimension is supported by other research and can be explained by the nature of the industrial context, which builds on an interactive relationship (see Section 2.2.6). Furthermore, it is noticeable that the customer values the sole perception of partnership (Aspara & Tikkanen, 2008).

The following constructs follow a similar categorisation. Nonetheless, the constructs looked at the elements in a more differentiated way by classifying all four aspects in tangible and intangible dimensions. Through exploration in the precision bearings product market, Mudambi et al. (1997) found that the customer-perceived sources of value are categorised into product, distribution, support and company categories, with tangible and intangible aspects being defined in each category (see Table 6).

2.3.3.1 Subdivision into tangible and intangible

Table 6: Perceived sources of value

Category	Product	Distribution	Support	Company
Tangible	-Precision -load of bearing	-Stated availability -Stated lead times	-Design advice -Product testing -Site support	-Financial stability -Years of experience -Global coverage
Intangible	-Innovation fit -For purpose over-engineered	-Ease of ordering -Reliable delivery -Emergency responds	-Understands our needs (business) -Troubleshooting	-World class -Technical leadership -Global perspective

(Mudambi et al., 1997, p. 442)

In this compilation tangible aspects are visual and experienced product aspects, written statements, experienced support and factual aspects of the company. The intangible aspects are driven by the associations through the interpretation of what is perceived. For example, the “innovation fit” or the interpretation of how “reliable the delivery” is, is

strongly driven by how the individual customer interprets the signals. On the other hand, the tangible aspects also have to be interpreted by the customer and are influenced through what the customer has in their mind (Dror, 2005) and how the customer sees precision, financial stability or what they see as good site support. Furthermore, the perceived aspects will have to be judged by their reliability.

Bendixen et al. (2004), who conducted an experiment with the buying centre in the indoor medium-voltage circuit breaker panel product market, also hint at this aspect. They mention that the judgement of stated short delivery times will ultimately have to be judged by its reliability and is therefore influenced by the customer's association with reliability of the brand, which is subsequently interrelated with trust in the brand (Bendixen et al., 2004).

Therefore, both aspects, tangible and intangible, are ultimately dependent on the perceptions and associations of the customer.

Other authors who have investigated the perceptions of industrial customers (Thompson, Knox & Mitchell, cited by Schmitt, 2011) support the differentiation between intangible and tangible aspects. It seems to help uncover the intangible factors of the aspects, which at first glance appear purely tangible. Nevertheless, such differentiation can be confusing since tangible aspects are also an interpretation before it has been experienced and are therefore supported, or not, by trust in the brand. The research by Bausback (2007) has, among other things, observed this interrelation.

Bausback (2007), who empirically examined the relevance of positioning factors in a wide range of product markets, categorises the factors into emotional and rational factors. This author discovered that the emotional factors can affect the cognitive attitude and rational factors the affective attitude. Therefore this kind of factor does not directly provide information about how the information is processed (Bausback, 2007). It seems that even intangible aspects can be processed rationally and vice versa. The identified potential positioning factors (emotional and rational) are listed in Table 7.

Table 7: Potential positioning factors

Emotional factors	Rational factors
<ul style="list-style-type: none"> -Reliability -Down-to-earth -Social responsibility -Charisma -To be present -Easiness 	<ul style="list-style-type: none"> -Integration -Information depth -Experience -Advice (real) -Price negotiation

(Bausback, 2007, pp. 287-288)

Concerning the emotional factors, the factors of reliability and easiness are coherent with the intangible factors in the category distribution of Mudambi et al. (1997). Being present can be allotted to the intangible aspect “emergency response”. The rest of the emotional factors describe brand personality factors, which are discussed later in this section. With respect to the rational factors, the topic of integration seems to be covered by the tangible aspects of precision and load of the barring and both intangible product aspects of Mudambi et al. (1997). Advice and, to some extent, the factor of experience are mentioned in the support category of Mudambi et al. (1997). Price negotiation can be allotted to the cost/price factor identified by Kuhn et al. (2008). Overall, the value of information depth seems to be a new factor. Otherwise, the mentioned factors seem congruent with the factors mentioned by Kuhn et al. (2008) and Mudambi et al. (1997).

Through exploration in a wide range of product markets, including manufacturing and service business, Leek & Christodoulides (2012) developed a framework classifying the brand values into emotional and functional factors (Table 8).

Table 8: The B2B brand values

Emotional	Functional
<ul style="list-style-type: none"> -Risk reduction -Reassurance -Trust -Credibility 	<ul style="list-style-type: none"> -Quality -Technology -Capacity -Infrastructure -After-sales service -Capabilities -Reliability -Innovation -Price

(Leek & Christodoulides, 2012)

The list of functional factors also comprises a description of the facilities; the structure of the company, perception of the capacity and the infrastructure. Willrodt (2004) also supports the relevance of the perceived resources. Furthermore, the capability factor is

seen to add a new aspect, compared to the previous list of factors, by describing different skills of a brand. At the same time, some of the previously mentioned factors, such as short delivery time (Mudambi et al., 1997; Persson, 2010), seem to be a sub aspect of the capabilities. Zhang, Jiang, Shabbir & Du (2015), who conducted an empirical study over a wide range of product markets, recognised the relevance and comprehensive nature of the capabilities aspect. They found that the marketing, networking and innovation capability of a brand has a positive influence on brands equity (Zhang et al., 2015). In line with this finding, Aspara & Tikkanen (2008) state that the customer's perception of the consultative expertise/capabilities, processes and performance in respect to solution and system offerings, has a strong influence on the customer's perception. Interrelated with capability is the perceived competence or expertise.

Mudambi (1998) states that the communication of competence is a factor that creates brand equity. Another competence mentioned by Willrodt (2004) is the technical competence, also mentioned by Mudambi et al. (1997) (technical expertise). Lennartz et al. (2015), who empirically examined the sources of brand strength in a wide range of industries and countries, also state that expertise is an influential driver. Drawing on literature about branding concepts, industrial marketing and organisations' buying behaviour, Keller and Webster (2004) also recommend that the brand should be built around the brand intangible aspect of expertise.

The rest of the functional factors seem to be covered by the previously discussed lists of factors. Interesting is that Leek & Christodoulides (2012) categorise reliability as a functional aspect, which supports the finding that the allocation is not ultimate and is influenced by what it is intended to describe: either the responded is talking about experienced reliability or the interpretation of the brand's reliability through the perception of specific indicators.

The identified emotional factors of credibility and reassurance are interesting factors as they help to refine the general brand value of "trust" and are seen to help describe the brand's effect on risk reduction. Leek & Christodoulides (2012) see the age and experience of the company not only as further company factors, but as supplier characteristics that influence the emotional and functional brand values. This interrelation seems understandable and interesting; nevertheless, it is assumed that other factors (for

example, quality) can also have this general effect and is therefore seen to be sufficient to treat these aspects as equivalent to the other listed factors.

2.3.3.2 *Ranking of criteria*

During an empirical research concerning the indoor medium-voltage circuit breaker panel product market, Bendixen et al. (2004) identify the importance of pre-defined criteria for selecting a preferred brand. The factor of quality is identified as the most important criteria (Table 9).

Table 9: Ranking of criteria

Ranking	Criteria
1	Quality
2	Reliability
3	Performance
4	After-sales services
5	Ease of operation
6	Ease of maintenance
7	Price
8	Supplier's reputation
9	Relationship with the supplier's personnel

(Bendixen et al., 2004, p. 376)

Despite not being specifically mentioned, it seems that the pre-defined criteria are explored during the first qualitative phase of the research. Except for the last criterion, the identified criteria seem to add no new factors in comparison with the previous five tables of Kuhn et al. (2008) Table 4, Persson (2010) Table 5, Mudambi, et al. (1997) Table 6, Bausback (2007) Table 7 and Leek & Christodoulides (2012) Table 8. The aspect "relationship with the supplier's personnel" is mentioned by Kuhn et al. (2008), but is not listed as an important factor, which seems to correspond with the findings of Bendixen et al. (2004) who rate it as least important. Nonetheless, this aspect is seen as a particularly important aspect of the B2B context (see Section 2.2.6), but is not a direct aspect of brand associations and is therefore discussed in Section 2.3.5.6.

- The number one criterion is quality and defined by Bendixen et al. (2004) as the customer's overall perception of quality. Therefore, the perception of quality cannot be clearly allotted to one aspect; for example, product quality in a sense is seen as an intangible aspect of the brand. Nevertheless, the perception emerges out of one or several specific aspects of the brand's performance (Bendixen et al., 2004).

- The next two criteria—reliability and performance—underlie the dimensions of quality (Abratt, 1986), which supports and leads to the conclusion by Bendixen et al. (2004) that quality is the main brand equity-generating variable. One explanation is that it can come to downtime of production, safety issues and warranty issues by third parties (Mudambi et al., 1997). The customer is therefore looking for ways to reduce this potential risk and in the case of failure will have to justify the decision for a supplier (Mudambi et al., 1997).
- The criterion of price is listed at a relatively low position. Nevertheless, the aspect of price is identified as one of the most favourable aspects by Kuhn et al. (2008), is listed as a functional factor by Leek & Christodoulides (2012) and is one of the rational factors of Bausback, (2007). “Price negotiation” in the assembly of Bausback (2007) seems to focus on the willingness and behaviour of the supplier.
- The fourth criterion—after-sales services—is an aspect that seems to correspond with the customer’s value of the brand being present (Bausback, 2007) when help is needed (Kuhn et al., 2008). Offering competent troubleshooting and the perception of a financially stable company are further corresponding factors identified by Mudambi et al. (1997).
- The ease of operation and maintenance are the fifth and sixth criteria. The emotional factor of easiness identified by Bausback (2007), the simplicity identified as one of the most favourable aspects by Kuhn et al. (2008) and the ease of ordering identified by Mudambi et al. (1997) and Persson (2010) all illustrate the appreciation of simplicity.

The determination that the perception of the overall quality is the leading factor is interesting; nevertheless, the holistic definition leaves a lot of room for interpretation about what aspects need to be considered. On the other hand, the favourable perception of being present whenever being needed and offering simplicity in all facets seem to be more instrumental.

2.3.3.3 *Personality factors*

In an explorative research over a wide range of product markets concerning brand personalities, Herbst & Voeth (2006) find that brands primarily have to demonstrate the performance of willingness and efficiency, which minimises the deficiencies of risk and information. The other factor is authenticity, which reflects the criteria of trust and credibility. They also identified that employees from different business functions evaluate brands differently. The purchasing function seems to value sensational factors more than management. Furthermore, for management to be able to take the optimal decision, the areas of performance and authenticity seem to be of high relevance. There also seems to be a difference among the business types, which will be discussed in Section 2.3.5.1. In relation to the study of Herbst & Voeth (2006) Herbst & Merz defined the following industrial personality scale (Table 10).

Table 10: The industrial brand personality scale

Performance	Sensation	Credibility
Performance-oriented -Professional -Analytical -Hard working -Intelligent -Pro-active -Educated Competent -Proper -Careful -Experienced -Rational -Problem oriented -Diligent Leading -Innovative -Internationally oriented -Scientific -Creative	Exciting -Young -Glamorous -Cool -Trendy -Daring -Good looking -Adventurous -Imaginative Charming -Cheerful -Feminine -Tempered	-Sincere -Real -Reliability -Down-to-earth -Honest -Original -Trustworthy

(Herbst & Merz, 2011, p. 1076)

The performance attributes seem to be complementary with the previously discussed factors and are seen to describe the personality aspects of an ideal counterpart for a partnership. Although Bausback (2007) refers to this area of personality by listing the emotional factor “charisma”, the sensation column is seen to comprehend a new perspective of factors. Furthermore, the emotional factor “social responsibility” of Bausback (2007) can be added to the credibility list.

Generally, the identified brand personality factors provide an interesting supplement towards the results of the previous research and help to provide a more complete overview of what relevant brand associations are and what perspectives need to be considered.

A further supporting aspect of a brand is that a brand mediates the customer feeling comfortable (Keller, 2010). The brand can lead to an image benefit for the customer when the customer is socially appreciated by the positive reactions of other people in the organisation. This leads to the customer feeling improved self-esteem, proudness and personal compliance (Keller, 2010). In accordance to this statement, it is assumed that the extraordinary fulfilment of the discussed factors leads to a positive reaction of the organisation and therefore also leverages the self-esteem of the buying centre member. Nonetheless, the findings of Herbst & Voeth (2006) uncover that the favourable aspects seem to differ depending on the business function.

2.3.3.4 Positioning directions

Drawing on the business marketing offer developed by the IMP Group (Ford, 2002b) and several case examples, Beverland, Napoli, and Yakimova (2007) suggest using five components for the business marketing offer (see Table 11). These are identified by the IMP Group as a basis for strategic directions of brand identity (positioning).

Table 11: Attributes for positioning

Tangible attributes	Intangible attributes
-Product -Services -Logistics	-Advice -Adaptation

(Beverland, Napoli, & Yakimova, 2007)

The more tangible attributes include the product, services and logistics. The intangible attributes include advice and adaptation. The tangible features seem more imitable in comparison to the intangible attributes (Beverland, Napoli, & Yakimova, 2007). Beverland, Napoli & Yakimova (2007) also reveal that brand identity decisions should be made with consideration to the type of customer utilising the firm's products and services, as well as the type of buying situations they face. Alternatively, a combination of the five strategic directions could be expedient. Mudamdi (2002) supports this statement by recommending cluster-specific activities. Mudambi (1998) also supports the

importance of added value services (for example, technical support services (advice)), which offer tangible and intangible value.

The classification of the factors as tangible and intangible or emotional and rational is irritating, as the boundaries seem floating. Again, Mudambi et al. (1997) classify the advice as a tangible factor, while Beverland, Napoli & Yakimova (2007) classify advice as intangible. This varying interpretation seems to be influenced by the aspects that are being compared. Mudambi et al. (1997) compare understanding to the actual advice, while Beverland, Napoli & Yakimova (2007) compare advice to the product and services. As mentioned, the classification is difficult because, according to Bausback (2007), the characteristic of the factor does not ultimately give information of how the factor is processed. Certainly, the experience of factors influences its tangibility. Even the stated product performance is judged by its reliability and is judged through an individual perspective. Furthermore, corresponding to Keller's (2013) third stage of the customer-based brand equity pyramid, experience leads to further judgement.

The most important judgement is influenced by direct interaction (Ballantyne & Aitken, 2007). Consequently, when the brand claims to deliver quality, it needs substance to be effective (Bendixen et al., 2004). As stated by Michell et al. (2001), the quality has to be perceived as quality by the customer (Bendixen et al., 2004). The brand image is distinct for market success (Davis et al., 2008). Michell, et al. (2001) conclude that strong brands have a high perception of quality, concise image, are a market leader and have a differentiated positioning.

Mudambi & Chitturi (2010), who examined a theoretically developed brand positioning model in a B2B context, present a more complete picture of possible directions for positioning by differentiating between product and co-operation and considering the importance of the relationship aspect. They state, as shown in Table 12, that brand equity is generated by two basic sources—either through differentiation or through relationship. Additionally, there are two platforms for investment, one is the product and the other is co-operation.

Table 12: Options of the B2B brand positioning to generate brand equity

Platform	Relationship	Differentiation
Product platform	Excellent customer service -Relationship service support	Distinguishable- Product benefits
Co-operation platform	Excellent supplier-customer relationship -Partnership co-operation	Distinguishable- Co-operation reputation

(Mudambi & Chitturi, 2010, p. 189)

These two main sources and platforms result in four options. One option is the differentiation through distinguishable product benefits. The second option is the differentiation through distinguishable reputation of the co-operation. The third option is to reach excellent service support concerning the customer service relationship and the fourth option is to reach an excellent supplier-customer relationship concerning the partnership co-operations.

Mudambi (1998) states, by a more general statement, that a brand strategy comprises intangible differentiation and added value to provide emotional and self-expressive benefits to the customer, stimulating positive perceptions and expectations and helping to build intangible aspects that lead to future purchases.

The categorisation of different strategies by Beverland, Napoli & Yakimova (2007) and Mudambi & Chitturi (2010) seems interesting to gain an overview of where brands of a particular industry are positioned, in order to get a feeling about the own relative position. Nevertheless, a brand needs to understand its personality and its uniqueness by uncovering how the customer perceives the brand, which Beverland, Napoli & Yakimova (2007) refer to by mentioning that the type of customer and buying situation need to be considered. The more general statement by Mudambi (1998) seems more sensible, thus predefining a route of a brand image/identity.

The review of the different results about relevant brand association factors leads to the following deduced proposition. The identified factors focus mainly on product brand performance aspects. Nevertheless, aspects such as simplicity, to be present, capacity, capabilities and competence also influence the customer's perception. The sole perception of relationship seems to be a leading factor while a high performing, sensational and credible brand personality appears to be desirable. The preferred factors seem to vary depending on the different business function perceptions. The approaches to categorise the different factors seem to be embossed by a basic marketing sight and

describe the aspects mainly on behalf of the marketing mix, rather than focusing on a holistic brand view. The classification of tangible and intangible is somewhat misleading as the tangibility and emotionality seem to always be embossed by what is in the mind of the customer, the trust in the information and in the end becomes tangible through experience.

The following section introduces the present results concerning brand resonance in the B2B area, which seems particularly relevant as the perception of partnership and the quality of the relationship itself is an important aspect for customer-based brand equity.

2.3.4 Brand resonance

Brand resonance represents the final stage where the customer has developed an attachment and loyalty towards the brand (Keller, 2013). The brand awareness, brand associations and on-going experiences lead in the best case to brand loyalty, which is characterised through a relationship that leads to re-buying and recommending the brand, as well as being interested in interacting with the brand (Keller, 2013).

In Kuhn et al. (2008) application of Keller's brand resonance aspect towards the B2B context, the Keller's described brand resonance construct appeared to be not applicable. The respondents mostly mentioned their experiences with the brand performance aspects. They also referred to their relationship with the salesperson and highlighted the importance of being able to contact the company's representative. They also highlighted the importance of the after-sales services and support, the perception of honesty and the desire of the sales staff to understand their needs and work in partnership (Kuhn et al., 2008). Kuhn et al. (2008) conclude that the final stage of the customer-based brand equity pyramid is about the customer perceiving partnership and solutions for their needs.

Borghini & Cova (2006), who conducted in-depth interviews with management of different B2B industries, support that the loyalty applies to the loyalty of people or a group of people. Brand loyalty is seen to exist as one aspect of several loyalties (Borghini & Cova, 2006). Further, loyalty to a brand is seen as a relational resource, which can be applied as an instrument in the B2B context where interaction, relationships and networks need to be managed (see Section 2.2.6) (Borghini & Cova, 2006).

On the other hand Michell et al. (2001), who examined brand value in the context of a wide range of industrial products, state that quality, reliability and performance are the top three variables generating brand loyalty. In their developed ranking, the relationship with the sales team is rated on the eighth position behind service, value for money, availability and familiarity. M. Richter (2007), who examined the meaning of brand in the machine, electro and chemical industries, identified the aspect of product and service competence to influence customer loyalty. Moreover, conciseness and continuity are also identified to have a interrelation with brand loyalty (M. Richter, 2007). The awareness and the image has a positive effect on brand loyalty (M. Richter, 2007). Nevertheless, other authors support that the relationship is more important than the differentiation of the brand (Mudambi & Chitturi, 2010). On the other hand Han & Sung (2008), who examined a general brand value and relationship model in a wide range of industries (electronics, electricity, engineering, chemicals, plastics and equipment), state that the resulting trust in a brand affects the relationship quality and the brand loyalty, and also brand loyalty affects relationship quality.

“Brand is said to be about building emotional relationships and it results from favourable perceptions, associations, and satisfaction with the brand experience at every touchpoint” (Ahmad & Baharun, 2010).

The relationship with company representatives, in particular the salesperson, seems to be decisive for ensuring customer loyalty. Nevertheless, the brand, which forms a kind of bracket over all activities of a company, is also seen to have its contribution towards loyalty.

Kotler & Pfoertsch (2006) recommend creating brand loyalty by moving from a pure transaction-based selling model to a relationship-based model. Leek & Christodoulides (2012) suggest addressing the emotional leads that are reinforced by consistent communication through the sales people, which will provide the initial building block for a relationship and loyalty. Therefore, how employees understand a brand also influences brand loyalty (M. Richter, 2007). Commensurable and consistent salespersons and the continuity of the brand appearance are important (M. Richter, 2007).

The brand loyalty aspect of the brand equity construct seems to be strongly influenced by the characteristics of the B2B context. Some aspects such as competence, consistency,

quality and reliability seem to have particular influence on the brand loyalty. Nevertheless, the main driver of loyalty seems to be the personal relationships with the company representatives, which evolve during the business interactions. Persson (2010) underpins this aspect by stating that loyalty is strengthened by commitment (promising and delivering), which needs to be cultivated by both parties.

In addition, the effect of the company brand on brand loyalty is stronger than the effect of the product brand (Van Riel et al., 2004). This seems to have been recognised as the majority of the machine, electro and chemical industries promote their performance under an umbrella brand, the enterprise brand (M. Richter, 2007). Loyalty is found to be a very important aspect as the interrelation between business success and brand success is loyalty success (M. Richter, 2007). Loyal customers also tend to recommend the brand and extend the brand halo to other product lines (Bendixen et al. (2004)).

Brand loyalty in a B2B context has its particular characteristics. The following section introduces some other brand equity aspects, which the current literature has investigated in the B2B context.

2.3.5 The influence of contextual aspects

As introduced in Section 2.2, the industrial business context has some particular characteristics that shape the way business is accomplished. Some research has identified that these characteristics seem to influence the degree of impact of the brand. Furthermore, the factors that need to be considered differ depending on the characteristics. In the following sections the identified influence of the business types and the interrelated goods, the characteristics of the customer, the buy type, the purchasing process, the environment, the relationship and influence of the people and which brand seems to be more relevant in a B2B context are described

2.3.5.1 Influence of business types and classes of goods

Generally, the brand seems to have more influence in service business than with physical products (Schmitt, 2011). Caspar et al. (2002), who conducted a large scale empirical research in a wide range of product markets, also state that the brand effect in the product category is below the average compared to the other business types.

Nevertheless, Yoon & Kijewski (1996), who examined the relationship of brand awareness and brand preference in the semiconductor manufacturing product market, state that the sensitivity seems to be higher when the product technology is less complex. Also M. Richter (2007), who accomplished a factors ranking for the meaning of the brand owner, identify a negative brand effect concerning more complex products. Hutton (1997) found, by conducting a large scale empirical research with purchasing professionals, that the brand is more efficient with complex products that require more support and service and where the individuals are under time pressure or have limited resources. In particular, brand awareness appears to have more effect with complex products concerning the perceived risk and information savings (Schmitt, 2011). Brand awareness is especially important at high product importance, high service share, high product complexity and high time pressure (Hutton, 1997).

The reasons for the apparent contradictory results are unknown. On the one hand, it seems sensible that less complex products have a higher potential to differentiate themselves through the brand, as the argumentation through functionality seems limited. On the other hand the required service and the higher risk involved with complex products seems also sensible to stimulate the importance of the brand. Nonetheless, the contradiction seems to be explainable through the characteristics of an industry segment.

Willrodt (2004) outlines the different aspects by stating that, for example, the importance of the brand competence depends on the complexity of the performance, the importance of the technology and the information required. Moderating effects include the needed information, class of buy and difficulty and depends on the industry. Caspar et al. (2002) also agree that the influence of the brand (function) is dependent on performance. M. Richter (2007) also states a higher meaning for the brand with high technological dynamics. A further aspect is the competition intensity and the complexity of the supply, meaning the quantity of comparable offerings (M. Richter, 2007).

The research of Caspar et al. (2002) also looked at the differences in relevance of the different business types (Table 13).

Table 13: Brand effect concerning business type

Business type	Deduced statements to brand effect
Products	Low
Investments	Highest
Component supply	High
Systems	Middle

(Caspar et al., 2002)

The results support the product category having a lower relevance. Nevertheless, Caspar et al. (2002) state that part of the low relevance seems to be explained by considering the product segments, which have a low manufacturing (added value) share. They state that the imaginary value of a brand becomes increasingly influential as the brand contributes further to the creation of the product (Caspar et al., 2002). Investment businesses seem to have the highest impact. The brand seems to generate risk reduction and information efficiency, whereby the brand seems to have a relatively small imaginary effect (Caspar et al., 2002). In comparison, the imaginary effect is the highest in the component supply business; this is explained by the high contribution to the design (Caspar et al., 2002).

In the service business, the brand seems to have an above-average effect; the general characteristics (complexity of performance, dynamics of technology, intensity of competition, etc.) of the industry (product) segment seem to influence the importance of the brand. Furthermore, the own contribution of the product market segment towards the performance creation seems to have an effect.

Nevertheless, the categories of the business type seem to have specific beneficial positioning factors. Bausback (2007) has identified business specific factors for the investment and product businesses (Table 14).

Table 14: Influencing factors concerning business type

Investments	Products
-Integration possibility -Willingness to negotiate price -Being down to earth	-Experience -Advice -Positive charisma

(Bausback, 2007, pp. 287-288)

Concerning highly customised products (component supply), authenticity is seen to have an above-average relevance, while the sensation category is seen as secondary (see Section 2.3.2). For standardised products, the communication of efficiency and

competence is seen as relevant. Moreover, the ability to keep pace with technology must be communicated (Herbst & Voeth).

Depending on the business type, the focus of factors seems to influence the customer's perception. Furthermore, the importance of the brand seems also to be influenced by how much the brand is influencing the outcome of the supply chain and is influenced by the characteristics of the product market segment and not solely by the business type.

The next section looks at a different although interrelated perspective of the influence of customer characteristics in a B2B context.

2.3.5.2 Influential customer characteristics

As recognised in the last section 2.3.5.1, the approach cannot be directly derived by the type of business and will need a case-specific investigation. By conducting an empirical research in the precision bearing product market with purchasing professionals, Mudambi (2002) recognises that each case needs an individual analysis. Furthermore, Mudambi (2002) discovered that branding is not equally important to all companies and for all purchase decisions. As shown in Table 15, Mudambi identifies three clusters of customer firms that differ in their perception of branding during the purchase decision.

Table 15: Summary of firm clusters

% of sample	Cluster	Buyer descriptor	Purchase descriptor	Process descriptor
49	Highly tangible	-Traditional -Moderate -Objective	-Typical -Product oriented	-Textbook -Structured
37	Branding receptive	-Large volume -Sophisticated	-Highly important -Risky	-Open-minded -Thorough
14	Low interest	-Low relevancy -Indifferent	-Routine -Low risk	-Convenience -Low involvement

(Mudambi, 2002, p. 531)

The largest group is represented by the highly tangible cluster, which describes a typical product-oriented purchase, accomplished through a structured process by an objective and moderate buyer. As the name of the cluster describes, the cluster focuses on tangible aspects and the main interest is on product benefits and the manufacturer behind the product (Mudambi, 2002). In this case Mudambi (2002) recommends communicating

objectively about the tangible and intangible benefits of the brand, which would aim to reduce the perceived uncertainty and foster the perception of corporate financial stability.

The branding receptive cluster describes a highly important and risky purchase, accomplished by an open-minded and thorough approach through a sophisticated buyer, which is in charge for large volumes. Srivastava & Mookerjee (2004), who explored the brand equity determinants in a banking application software product market, support the description of the branding receptive cluster by stating that the role of the brand depends on the risk and the strategic importance of the buying decision. In this case Mudambi (2002) recommends communication that emphasises the unique nature of each purchase, and acknowledges the need for objective advice and the support from a well established, highly reputable and flexible manufacturer. Furthermore, the communication will contain quality aspects of the product and augmented services, and highlight emotional and self-expressive benefits.

The smallest group is the low interest group, which describes a low risk, routine purchase, characterised by a process focusing on convenience with low involvement, accomplished by an indifferent low relevant buyer. Although the cluster is characterised by low interest, Mudambi (2002) states that a branding strategy will focus on the potential importance of the purchase decision. “Product catalogues and websites can be made attractive and appealing in an attempt to increase buyer interest in the product and in the purchase decision.” (Mudambi, 2002, p. 532) Even testimonials from customers who in the beginning did not take the purchase decision seriously can be communicated (Mudambi, 2002). Furthermore Mudambi (2002) comments that additional investment in product development may not be as effective as investing in easy-ordering possibilities (coordination of facsimile, telephone, online and personal selling).

The identified clusters recognise that some groups see brand awareness, brand image and the number of prior purchases as more important than other groups. Nevertheless, the other two groups also have favourable associations, tangible aspects and ease of business, which are recommended to be implemented and communicated. The difference lies in what aspects are perceived as favourable. Mudambi (2002) argues that marketers will benefit by analysing the branding implications for each customer, regarding brand naming, the physical product, pricing, distribution, advertising, promotion and personal

selling. A further aspect to consider is that the customer's own quality strategy also influences the customer's perception (M. Richter, 2007).

In addition to the combined characteristics of the buyer, the purchase, the process and the characteristics of the buying centre, which represents the customer in a B2B context, have an influence on the impact of the brand (Caspar et al., 2002).

According to Alexander et al. (2009), the importance varies among the decider, the user and the influencer, based upon research of tyre brands for heavy vehicles. The deciders allotted the highest and the users the second highest relative importance to the brand. Alexander et al. (2009) explain the result by that the users and the deciders are directly involved and directly depend on the performance of the tyres. The influencer is looking at the aspect in a more economical way, by focusing more on the durability of the tyres. Willrodt (2004) and Bausback (2007) confirm the differing perspective by stating that the importance of the brand competence depends on the position of the participant. Furthermore, Bendixen et al. (2004) also discovered that the user rates the importance as high when compared to the rest of the buying centre. Nevertheless, the technician in the research, defined as the influencer, allotted an even higher relative importance. Bendixen et al. (2004) explains the high appraisal through proximity to the functionality of the product and their aspiration to minimise risk.

Risk reduction is seen as a central topic for all individuals of the buying centre, but they have different views on what is seen as a risk. "While each of these participants may be trying to minimise both the risk of product performance and the psychosocial risk of making a decision that will be judged by others, each may also define those risks in a different way." (Keller & Webster, 2004, p. 395)

In addition, perception of the different business functions seems to vary. Bausback (2007) states that the relevancy of positioning factors is moderated by the business function and identified that the purchasing function particularly values experience, advice and a good image. Herbst & Merz (2011), who conducted an empirical research in a wide range of product markets, confirm the differing perception of the business functions by identifying that the production function seems to focus on sensational aspects; management in comparison focuses more on credibility aspects (see Table 10). Nevertheless, both business functions perceive similar aspects of the brand performance, which also

represents the category with the overall highest perception (Herbst & Merz, 2011). Keller and Webster (2004) recommend that the basic value proposition has to have relevance to all players. Therefore, the answer seems to lie in considering the different needs of the members and at the same time to ensure to consistently communicate the basic values (Randall, 2006). Based on a book review of three different views of branding, Moorthi (2004) recommends soft factors such as emotional and self-expressive values.

A further characteristic of the buying centre, driving the relevance of a brand, is seen in the size of the buying centre. M. Richter (2007) identified, by interviewing several brand owners, that the relevance seems to be higher the larger the buying centre is. This aspect seems sensible, as the brand also helps to harmonise the different perspectives of the buying centre (Wünsche, 2010). Furthermore, Shipley & Howard (1993), who conducted an empirical research in engineering, chemicals, computers, plastics and paper product markets, identified that larger companies give branding a higher importance than smaller companies. Their findings also disclose a value contribution of the product identity towards marketing success and the financial effect.

A somehow contradictory interrelation is identified by Brown, Zablah, Bellenger & Donthu (2012) who examined the relationship between purchase risk and brand sensitivity of a large scale of buying centre. They discovered that brand sensitivity and purchase complexity are more strongly related with smaller companies and unrelated with large companies (Brown et al., 2012). The interrelation is explained by the fact that smaller companies have fewer resources to dedicate to information processing during complex purchase situations (Brown et al., 2012). Another explanation for this contradictory finding is that larger companies accomplish complex purchase situations more frequently and therefore see them as a common event, and therefore does not affect their perception.

Apart of this contradictory finding concerning complex purchases, the brand appears to have a harmonising effect with an interrelation between valuing a strong brand and seeing the value to work on the own brand, at least for bigger companies. Considering this interrelation, big brands are most possibly supplied by strong brands. Furthermore, complex purchase situations foster brand sensitivity, at least for smaller companies.

Overall, two general aspects need to be considered.

On the one hand there seem to be differences in perceptions of the brand by the customer; these can be categorised by the characteristics of the buyer, the type of buy and the process. To enhance the effect of the brand, the different categories should be recognised by adapting the branding factors.

On the other hand the variety of the buying centre should be acknowledged, as well as the basic value proposition of the brand having relevance for all the significant players in the decision-making unit during the process (Keller & Webster, 2004). The relevancy of positioning factors is moderated by the function, the position, the influence of the buying centre member and the size of the buying centre (Bausback, 2007). Bendixen et al. (2004) state that, to build a strong brand, communication with the entire buying centre has to look beyond marketing communication and consider a total corporate communication program. This seems particularly challenging for bigger customer companies, which will tend to have bigger buying centres with a higher variety of perspectives. Furthermore, the aspects that influence the importance of the brand seem to vary depending on the size of the company. Small companies profit through information efficiency while for larger companies the harmonising effect seems to be a particular aspect.

As mentioned, the type of buy is one aspect by which to categorise the customer; however, the buy type itself has different categories that are investigated regarding their brand impact.

2.3.5.3 Influence of the purchase characteristics

As described in Section 2.2.3, the main types of buy are the new (task) buy, the (straight) re-buy and the modified re-buy. The branding literature also classifies the buying types into frequent and infrequent buys. The infrequent buy has similar particularities as the new buy and the frequent buy has similarities to the re-buy type of purchase (M. Richter, 2007).

Generally, the importance of the brand varies depending on the class of buy (Willrodt, 2004). The characteristics of the positioning factors are moderated by the frequency of buying (Bausback, 2007).

It is apparent that the brand seems to be particularly relevant during new purchases (C Homburg, Jensen, & Richter, 2007; M. Richter, 2007). Gomes et al. (2016), who examined the relevance of the brand in the construction market, state that brand awareness is particularly relevant during new purchases. Bausback (2007) discovered that two factors—integration possibility and the willingness to negotiate—are relevant during infrequent buys. Herbst & Voeth (2006) discovered that emotional sympathy, values and authenticity are relevant factors during single market transactions; these authors distinguish between single and multiple transactions.

Concerning multiple transactions, performance and innovation capability are important, most possibly when the relationship is long-term (Herbst & Voeth, 2006). Furthermore, during frequent purchases, the brand is also found to be relevant (Gomes et al., 2016) and advice and experience seem to have a positive effect (Bausback, 2007).

It is understandable that the brand is particularly relevant during a new buy as there is insecurity and therefore risk that the consumer is striving to reduce. However, all business types experience a new buy, which represent the first step in a new transaction. Therefore, categorising buys as frequent, infrequent and even single transactions seem constructive for determining the influence of the brand, as it is believed to represent the actual procedure in a more practical way. In this sense, the brand is important for any type of business.

The integration possibility and perception of authenticity seem sensible factors to focus on for a business that is, at the beginning, relatively impersonal and has time restrictions. The customer needs to judge the product's compatibility and interpret the realisation probability of the brand's promise in order to ensure its own business success. For a long-term relationship these aspects are believed to be relevant; nevertheless, it is also sensible that focus lies more on aspects (innovation, experience and advice) that will ensure successful business for the future.

In addition, the importance of the brand also depends on the importance of the buy (C Homburg et al., 2007; M. Richter, 2007). An important buy is defined as a purchase situation where the perceived importance of productivity and profitability of the customer's organisation is influenced (M. Richter, 2007). It is crucial to consider this

relation; the relative term is also important and is driven by the context and perception of the customer.

Overall, perception of the brand helps to reduce the perceived risk and helps to judge the possibility for a successful partnership. Most business relationships are also recognised to be long-term (Ford, 2002b; Hutt & Speh, 2004) and it is therefore assumed that the business relationship will normally start by a new buy, go on with a period of infrequent buys (ramp-up of product) and hopefully continue with frequent buys. Therefore, the relevant factors seem to be more like a continuum of factors, which are considered to influence the perception of the brand throughout the relationship.

The following section looks at the contemporary aspects that influence the perception of the brand throughout the process and form the relationship.

2.3.5.4 Influence of the purchasing process

As discussed in Section 2.3.5.1, the influence of the brand seems to depend on the business type. Interrelated with this finding Caspar et al. (2002) discovered that the influence of the brand depends on the purchasing process, which varies depending on the product market segment. Yoon & Kijewski (1996), supported by Caspar et al. (2002), recognise that the brand sensitivity is higher when the purchasing process is less complex, which also varies depending on the business type (product market type).

Furthermore, the role of the brand seems to vary depending on the phase of the buying process (Srivastava & Mookerjee, 2004; Thompson, Knox, & Mitchell, 1997). Srivastava & Mookerjee (2004), for example, identify trust as one of the main brand equity aspects during the initial phase, which is fostered by benchmark results, clients familiarity with the brand, visibility of the brand, perceived expertise, approval by experts and perceived satisfaction of existing customers.

Corresponding to the type of buy, the brand relevance seems to be decisive in the beginning. The influence of the perception of satisfied customers also points out that the customer's perception after the buy forms the perception for future new customers. The brand value is confirmed or disconfirmed during use (Ballantyne & Aitken, 2007). Therefore, the value propositions are essential performances to perform (Ballantyne & Aitken, 2007). Ballantyne and Aitken (2007) refer to a service-dominant logic concept,

which requires a focus on the interaction process rather than on the point of sales. The concept suggests that the service experience of customers influences brand equity through brand awareness and brand memory, which are derived from the historical experience and influences the life of the brand. All product and service experiences melt with brand associations over time to influence the company's reputation. "The time logic of marketing exchange becomes open-ended, from pre-sale service interaction to post-sale value-in-use..." (Ballantyne & Varey, 2006, p. 336)

The first impression is important; however, the rest of the customer's journey also needs to be considered and leads to loyal customers recommending the brand, which is in essence the top-level brand equity.

Apart from the direct interactions, there are also environmental aspects that influence the perception of the brand (Caspar et al., 2002).

2.3.5.5 Influential environmental aspects

Independent of the product market, some general aspects seem to influence the importance of the brand.

As identified in Section 2.3.2, the perception of quality is a relevant brand association factor. Corresponding with this finding, the quality difference between brands seems to increase the importance of the brand (Caspar et al., 2002). On the other hand, according to Mudambi et al. (1997), the brand can be particularly important in markets where differentiation between quality and price is difficult. Although these two statements seem contradictory, they also complement each other, disclosing the state of different stages of markets. In markets where there are players offering outstanding quality, the quality brand will most possibly generate higher brand equity. In markets where the players all offer comparable quality to a similar price, differentiation through intangible factors is fostered. The answer lies in the differential effect, which needs to be achieved to generate brand equity (Keller, 2013).

Yoon & Kijewski (1996) identify increased sensitivity towards brand awareness when there is higher competition intensity and when there is dominance of price over quality. M. Richter (2007) supports the statement that competition intensity stimulates the influence of the brand. It therefore seems that competition increases the effect of brand

equity and straight brand awareness could be an answer in markets with comparable quality, which are moving in a downward spiral.

Furthermore, the number of manufacturers in a market seems to reduce the brand influence, which is explained by Caspar et al. (2002) through the reduction of possible relevant differential positioning factors. M. Richter (2007) discovered that the higher the technological dynamics in the market is, the more relevant the brand.

In summary, quality remains a leading brand factor, but diminishes in markets where players offer comparable quality. The brand seems to be more relevant in a market where the dynamic and market pressures are higher, and reach saturation when the number of critical market players are exceeded.

Besides the characteristics of the market, the B2B brands seem to be strongly influenced by the characteristics of the people involved in the business transactions.

2.3.5.6 Relevance of people and business functions

As discovered in Sections 2.2.4 and 2.2.6, the purchasing process is highly interactive with various exchanges of communication and transfer of output and input between the departments of the customer and the brand. Individuals influence the relationship through behaviour, aims and experiences (IMP-Group, 2002). Nonetheless, there seems to be two central business functions that influence brand perception.

According to Bendixen et al. (2004), visits by sales representatives are one of the main instruments for gaining brand awareness. Kuhn, Albert & Pope (2008) acknowledge that company representatives play a remarkable role in building brand equity. Baumgarth & Binckebanck (2011), who examined the impact of the sales force towards brand equity in a variety of business types, support this finding and state that the salesperson's behaviour and personality have more impact towards building and maintaining a strong brand than product quality and non-personal communication. Furthermore, the behaviour seems to be more important than the personality of the salesperson (Baumgarth & Binckebanck, 2011). Based on the theoretical work by Lynch & Chernatony (2007), sales representatives are the key for brand communication in a B2B context, since they can gather information during interactions with the customer and the brand message can be adapted (Lynch & Chernatony, 2007). Brand communication should focus on the buyer's

communication styles and their information processing, which enables sales to maximise their outcome (Lynch & Chernatony, 2007).

As sales representatives have a short-term planning horizon, it can be difficult to manage them to communicate in line with the brand's strategy, which comprises long-term values (Keller & Webster, 2004). Therefore training, compensation and incentives have to enforce the implementation of the strategy (Keller & Webster, 2004). Furthermore, the salespeople in B2B are interacting with the customer's entire buying centre and therefore need to be trained to respond to the customer's concerns while simultaneously communicating the brand values (Lynch & Chernatony, 2007).

Another important business function according to Ahmad & Baharun (2010) is the B2B entrepreneur's role, as it is crucial in establishing brand leadership, personality, identity and therefore also equity. According to a case study of a business process service provider, Ahmad & Baharun (2010) state that the influence varies depending on the structure of the company, the environment and the influence of the shareholders. The entrepreneur has a strong influence, especially during the start-up phase, on employee performance and is normally directly involved in negotiations with customers.

It is comprehensible that the entrepreneur plays a crucial role, as the decisions and instructed activities are ultimately influenced by the entrepreneur's values, which are perceived by the customer. The salespeople and employees from other departments make the brand real and need to be convinced of the strategy (Lamons, 2005) as the brand value is confirmed or disconfirmed during use (Ballantyne & Aitken, 2007). The power of the brand lies in what customers experience over time (Keller, 2013).

The B2B business relationship seems to be peppered with possibilities to experience the brand, since the relationship has many touchpoints (Backhaus & Voeth, 2014) and is close and mostly long-term (Hutt & Speh, 2004).

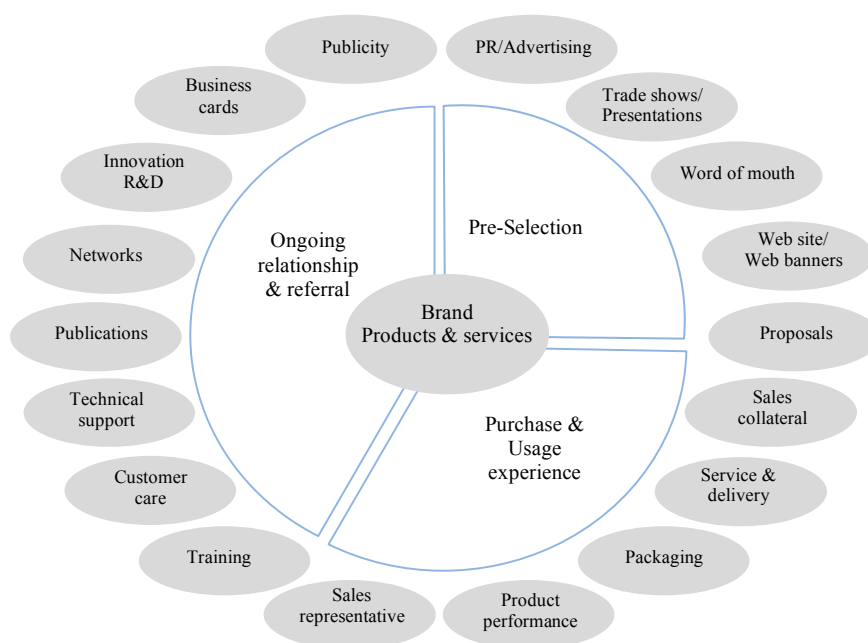
2.3.5.7 Influential relationship and network characteristics

As mentioned in Section 2.3.4, loyalty in a B2B context seems to be embossed by loyalty towards people or a group of people and the brand seems more likely to be a resource to manage the relationships (Borghini & Cova, 2006). Nevertheless, understanding and responding to how the brand is being utilised shapes the brand's image (Mäläskä et al.,

2011). Furthermore, it needs to be understood that the ambient network of the brand influences the brand's equity (Mäläskä et al., 2011).

Based on narrative interviews with senior management of different fields of business, Mäläskä et al. (2011) describe that the brand is influenced by the interaction of direct relationships and by the interaction of business relationships in the network. Possible network participants include partners, service providers, suppliers, media, channel members and customers (Mäläskä et al., 2011). Mäläskä et al. (2011) recommend identifying the key players of the network, which they name the branding pool, to exploit the relationships and coordinate the activities so as to enhance the brand equity. Mudambi (1998), who conducted an empirical research in the precision bearing product market, agrees with this perspective and states that the development and promotion of the brand have to be coordinated and the focus towards customers and supply chain partners followed.

The relationship and the included purchasing process have many touchpoints and are divided into distinctive phases, wherein the post-purchase experience also needs to be considered (see Section 2.2.4). Kotler & Pfoertsch (2006) take this aspect into account in their approach of B2B brand management (see Figure 7). They state that to assure a consistent brand impression, a holistic approach is needed, which means that every single contact has to be known and managed throughout the process, beginning with the pre-selection and continuing through the on-going relationship (Kotler & Pfoertsch, 2006).



(Kotler & Pfoertsch, 2006, p. 72)

Figure 7: The brand-customer relationship

The positioning topics need to be implemented at all contact points that the company has with the customer (Bausback, 2007). Kotler & Pfoertsch (2006) consider the importance of the network aspect during the ongoing relationship and referral phase. Although they do not go into detail, the visualised relationship phases emphasise the importance of considering the whole relationship (also after the purchase) and the generic touchpoints help to recognise the range of aspects that need to be considered.

The instruction to manage the process and the touchpoints discloses the need to manage the performance of the various departments, which actually implement the brand promise. The relevance of this aspect has been picked up by literature dealing with internal branding. Internal branding is a recent concept that concentrates on the corporate brand identity and focuses on the employees' crucial roles regarding the brand (Lynch & De Chernatony, 2004). In the service business, internal branding becomes even more important as the effect of the employees' performance seems to have superior immediate influence on perception of the brand (Morhart, Herzog, & Tomczak, 2007). Although internal branding seems to have a superior relevance in service business, the subject seems to be generally relevant in the B2B context. One aspect is the frequent interaction among the departments (Backhaus & Voeth, 2014); the other aspect is the close and personal relationships between the parties that can lead to the instance that the individual's behaviour influences the relationship (IMP-Group, 2002). Moreover, the relationship with the supplier's personnel appears to be valued as it is found to be a ranking criteria for selecting a brand (Bendixen et al., 2004).

As different departments and individuals are involved, it is important that the brand message be consistent, as well as being easy and expected (Lamons, 2005). The branding needs to be integrated through all departments (also subsidiaries) and all actions need to transport the same brand essence (Lamons, 2005). The influence of the whole network needs to be considered (Mäläskä et al., 2011). This will increase the possibility that the customer will become a customer again (Randall, 2006). It seems apparent that successful implementation is dependent on the leaders recognising that the brand is a strategic asset. The quality of the relationship itself is appraised and factors such as trustworthiness, perceived commitment and co-operation are perceived as being valuable brand association factors (Persson, 2010). Strong leaders (especially the CEO) need to stand for long-term values and not react and base their decisions on short-term profits (Kotler & Pfoertsch, 2007). The values of the leaders and the way of leading their team, or the CEO

the company, will influence the way the brand promise is implemented and perceived by the customer.

The B2B relationship is characterised by networks, personal relationships and the value of relationship quality, accompanied with an extensive customer relationship with various touchpoints. This condition calls for a comprehensive consideration of the influencing network partners, as well as the management of the implementation of the brand values, beginning with top management and extending to the departments and the individual behaviours. Therefore, topics to consider include strategic business management aspects and individual personal behavioural aspects. The next section provides some insight about what brand type is seen to be most relevant for customer perception.

2.3.5.8 Relevance of the corporate brand

The benefits and relevance of the corporate and the product brands were investigated in the literature with regard to the B2B brand.

Mudambi et al. (1997) analysed the process of choice where screening was accomplished simultaneously for potential suppliers and products. The final choice was usually about a supplier and not a specific product. Kuhn et al. (2008) state that the corporate or manufacturer brand seems more relevant in a B2B context than the product brand. Moreover, according to van Riel et al. (2004), who examined a brand equity measurement model in the high performance engineering plastics product market, the effect of the corporate brand on brand loyalty appears to be stronger than the effect of the product brand. Furthermore, Srivastava & Mookerjee (2004) discovered that the credibility of a company and the perception of having strong alliance partners influence the perception of trust in a brand.

The perception of a product with a high market acceptance also increases trust in a brand (Srivastava & Mookerjee, 2004). Michell et al. (2001) recommend developing a core brand that is usually based around a particular product, which gives long-term differentiation, provides a platform for growth and acts as an umbrella for the individual products. Moreover, Mudambi & Chitturi (2010) identify that in situations with smaller buy volumes and low risk, the customer sees the brand attributes of the product as more important than the corporation's reputation. Even in situations with high volumes, the product benefits remain more important. The relevance of the corporation increases with

purchases of high volume and situations of high risk. The difference of importance between corporation reputation and product benefits is practically compensated in risky situations (Mudambi & Chitturi, 2010). Mudambi & Chitturi (2010) state that the customer's perception is more complex in its assessment during risky situations or when purchasing high volumes. Moreover, the research of Mudambi & Chitturi (2010) has identified that the differentiation through product benefits or company reputation is more important than the relationship between customer and supplier.

The selection of whether to brand the corporate or product level is connected to the basis that is most relevant to establish brand identity (Beverland, Napoli, & Yakimova, 2007). It seems advisable to have as few brands as possible since it is more effective to focus on one main brand. This corresponds to the argument of Michell et al. (2001) who state that customers often buy different products from the same supplier and therefore cannot be treated as if they have different modes of purchase and no interactions with other products (brands). It therefore seems advisable to generally focus on the corporate brand. Building a corporate brand gives a company more flexibility for development as the brand is not connected to one product type.

These contextual influences with insight about brand function, awareness, associations and brand resonance are composed in the following conclusion, which intends to outline the current state of knowledge and the recognised gaps in the understanding of customer-based brand equity in a B2B context.

2.3.6 Conclusion to current knowledge on brand equity in a B2B context

The reviewed literature educed diverse interesting partial aspects. As stated by Leek & Christodoulides (2011), the findings seem rather disconnected. An explanation seems to be in the former approaches. On the one hand research has been dedicated to proving the relevance while on the other hand it has utilised existing brand equity concepts to identify the composition of brand equity in a B2B context. Therefore the literature is concentrated on relevance discussions and the evaluation of differences between B2B and B2C concepts; the theory development in this area remains somewhat limited (Persson, 2007).

Independent of the market, the main brand functions are risk reduction, decrease of information costs and the imaginary benefit (Caspar et al., 2002). The main function in the B2B market seems to be the risk reduction function (Caspar et al., 2002). Added to

this focus, the brand seems to have some particular characteristics in a B2B context. The brand serves to reduce complexity (Backhaus & Sabel, 2004), which seems to be interrelated with risk reduction and the decrease of information costs. Furthermore, the B2B brand acts as a sign for continuity and has a harmonising function (Wünsche, 2010); the perception of continuity also helps to decrease the risk. The harmonising effect arises as a group of people influence the decision. The harmonising effect seems to be a downstream effect of the individuals' perceived risk reduction, which stimulates an agreement among the buying centre members. Furthermore, the effort and time invested for a decision is reduced (Wünsche, 2010). The B2B brand therefore has no particular function, although it seems to have a particular focus and characteristic of the brand functions. The brand seems to have a low effect concerning the imaginary benefit (Caspar et al., 2002).

The literature agrees on the beneficial effects of brand awareness (Alexander et al., 2009; Bendixen et al., 2004; Persson, 2010; Schmitt, 2011; Yoon & Kijewski, 1996). Furthermore, brand awareness alone as the basis for brand equity can induce the perception of quality (Alexander et al., 2009) and has a positive effect on market success (Davis et al., 2008; Christian Homburg et al., 2010). The most effective approach to generating brand awareness is with personnel involvement. This is an interactive approach. However, the preferred means seem to be business function specific (Bendixen et al., 2004).

The current literature offers a multifaceted group of favourable brand association factors and categories. The categorisation into intangible and tangible or emotional and rational (functional) helps to order the different factors and gives some orientation for what is described with the listed factor. The allocation is not always apparent and the literature in some cases disagrees with the classification. The classification into intangible and tangible factors seems also to be driven by the aim to demonstrate that intangible factors are also relevant in rational systematic buying decisions and that the brand therefore has a high importance (Mudambi et al., 1997). The factors seem to all have a tangible and an intangible aspect as the emotional aspects can be rationally processed and vice versa (Bausback, 2007). A possible explanation is that the perception is always influenced by what is in the mind of the customer (Dror, 2005). The classification into company, product, service, support, distribution and relationship (Mudambi et al., 1997; Persson, 2010) seems helpful to be able to exploit the listed categories. The categorisation is

strongly oriented on the classical marketing mix, which seems to not grasp the comprehensive aspect of a brand and does not completely describe the different aspects of an overall bracket of all activities of a company, but rather describes the different activities. A more generic approach towards the categorisation is presented by Herbst & Merz (2011), who identify three main brand personality categories. The categories focus on the aspects of brand personality. The associations concerning the product brand performance aspects are generally identified as highly dominant and favourable brand associations, and represented by straight product aspects, the distribution of it, the support and the service for it. Apart from that, the current literature has not yet come up with any generic brand association categories; nevertheless, the various identified factors are revealing and offer a good overview of the different possible colours of a favourable brand. Generally, the listed factors describe the attributes of an attractive partner, which offers the characteristics required of a successful business partnership. The perception of relationship is a favourable factor, which actually represents the brand resonance that is strived for.

Brand resonance seems to be mainly characterised by a loyalty to the people working for the brand (Borghini & Cova, 2006), especially the salesperson (M. Richter, 2007), and the perception of partnership (Kuhn et al., 2008). In this relational context, the brand serves mainly as a tool to influence the relationship (Borghini & Cova, 2006). The relationship seems also to be formed through favourable associations (Michell et al., 2001), satisfaction at every touchpoint (Ahmad & Baharun, 2010) and fulfilling the brand promise and the perceived commitment (Persson, 2010). Loyalty towards a brand is encouraged by the perception of favourable brand associations that include competence, consistency (Michell et al., 2001), quality and reliability (Michell et al., 2001). Brand awareness can also lead to brand loyalty (M. Richter, 2007). Additionally, the customers tend to recommend a brand and possibly also consider other products of a brand (Bendixen et al., 2004).

Complementary to the collected aspects of the general brand equity assets, the literature has revealed the following contextual aspects, which influence brand relevance and the composition of the relevant brand factors.

The corporate brand seems to be the most effective brand in influencing the perception of the customer (Kuhn et al., 2008; Mudambi et al., 1997; Van Riel et al., 2004).

Corresponding to the B2C market, the relevance of the brand seems to vary with regard to the product market segment and does not directly depend on the different business types. The brand's share of added value for a particular product or performance seems also to influence the relevance (Caspar et al., 2002). Even the customer's own quality strategy (M. Richter, 2007) and size of the customer's corporation seem to influence the brand relevance (Brown et al., 2012). The brand communication seems to be particularly relevant during a new buy (C Homburg et al., 2007; M. Richter, 2007). Correspondingly, relevance seems to be higher during the first phase of the buying process (Srivastava & Mookerjee, 2004; Thompson et al., 1997). The brand promise is confirmed in use and the literature calls for focus on the interactive process, which starts during pre-sales and extends to post-sales (Ballantyne & Aitken, 2007) and is peppered with various touchpoints (Kotler & Pfoertsch, 2006). Hence, the satisfied customer appreciates the customer-supplier relationship and is willing to recommend the brand. The market dynamics, market pressure and the technological dynamics (M. Richter, 2007) increase the relevance of the brand.

The different business types, purchase frequencies and purchasing phases have particular favourable factors that influence the brand perception. The varying factors can also be seen as a continuum of factors that need to be considered during a business relationship. Factors that increase trust seem to be particularly relevant in the beginning, while factors that are beneficial for a successful partnership are of interest long-term (Srivastava & Mookerjee, 2004). The different perspectives of the buying centre members and the accordingly differing factors have to be considered (Bausback, 2007; Bendixen et al., 2004; Herbst & Merz, 2011). The basic value proposition is relevant for all significant members (Keller & Webster, 2004). Additionally, the influence of the network partners and the superior influence of the entrepreneur (Ahmad & Baharun, 2010), the salesperson (Baumgarth & Binckebanck, 2011; Bendixen et al., 2004; Kuhn et al., 2008; Lynch & Chernatony, 2007) and the department leaders (Lamons, 2005) have to be taken into account.

There seems to be no doubt about the effect of brand awareness and that brand awareness is a relevant part of brand equity in a B2B context. The extensive examination of the relevance of the brand has led to the conclusion that there is an interrelation among the market pressure, market dynamics, purchase characteristics and is product market specific. Moreover, the relevance depends on the customer-corporation characteristics

and the relevance is particularly high during the first impression. While these results seem interesting, they do not add much to the understanding of brand equity; rather, they add evidence for the existence of brand equity. The various facets of identified favourable brand associations are consolidated and describe an ideal business partner for joint successful business activities (see Appendix F). The found categorisations have not helped in understanding what the essential assets of a B2B brand are. In agreement with Persson (2007), the brand assets in a B2B context need to be refined and possibly further categories added. It is not yet clear what industrial brand equity realises (Leek & Christodoulides, 2011). It therefore seems sensible to generally reflect upon pre-defined terms to improve the understanding of brand equity in a B2B context (Persson, 2007), and to question, for example, the brand as a cluster of functional and emotional benefits in a B2B context (Leek & Christodoulides, 2011).

The literature offers some indication that the perspectives of the buying centre members vary based on the differing interests and the perceptions of the brand during different phases. There seems to be no research that examines the influence of the buying centre's characteristics (Klarmann & Fleischmann, 2014). Another aspect that offers a lot of room for further investigation is the nature of the business relationship. On the one hand the favourable factors seem to vary depending on the phase of the purchasing process. The literature does not consider the whole process and empirically explores the business relationship. Exploring the customer's perception during the interactivity and the various touchpoints would appear to be exceptionally helpful to further understand customer-based brand equity in a B2B context. Kotler & Pfoertsch (2006) offer an indication of the range of influential aspects by visualising the business relationship (see Section 2.3.5.7) with some of its touchpoints. They do not offer any description about what the customer is perceiving during the business relationship. As deduced from the review, the differing focus of factors influenced by the frequency of buy seems to represent a continuum of factors during a business relationship. It would seem sensible to empirically explore this continuum and consider the different buying centre members' perspectives, which represent the customer in a B2B context. Moreover, the medium of how the awareness and image are transported is only partly investigated. Mudambi et al. (1997) conclude that further research should concentrate on how factors are actually valued.

The review of the consumer-based brand equity literature, the B2B brand literature and the industrial business literature offer the basis for the following presented research framework.

2.4 Outline of research framework

The described framework serves to outline for this research project what constitutes a brand and to define the notion of customer-based brand equity in a B2B context. After delimiting the influential contextual aspects and identifying gaps in the current B2B branding literature, this section describes the aims of this research project.

2.4.1 Delineation of the brand

According to consumer branding literature, a brand is a sign for orientation (Torelli, 2013; Wünsche, 2010) that comprises meaning (Bastos & Levy, 2012) and serves as a unique identifier (D. A. Aaker, 1996). As defined in Section 2.3.5.8, the company brand is the leading sign for orientation in a B2B context (Mudambi et al., 1997). The company brand also has a great effect on loyalty (Van Riel et al., 2004) and is very influential in building awareness (Kuhn et al., 2008). The consumer brand literature describes a brand as a phenomenon that has developed into a multidimensional, multifunctional and malleable entity (Bastos & Levy, 2012). Based on the favourable factors that have been identified so far (see Section 2.3.3 or Appendix F for an overview)—for example, expertise, ease of ordering, product quality, after-sales support, general reliability, etc.—a brand represents several company performances and represents an entity on whose behalf people, groups of people and networks interact (see also Section 2.3.5.7). In this sense, a brand has a holistic nature and the company brand brackets all of the company's activities; at the same time, these activities form the brand (Brandes & Biesalski, 2010). This holistic view of a brand serves as the working definition for this research.

2.4.2 Customer-based brand equity in a B2B context

The notion of customer-based brand equity has been developed within the business-to-consumer market (B2C) (Kuhn et al., 2008). Kapferer helped to structure the different brand equity constructs (Anselmsson et al., 2008; Kapferer, 2012) into brand value (the value in terms of cash flow), brand strength (e.g., the generated market share, leadership and penetration) and brand assets (e.g., brand awareness, associations, attachment). The brand assets describe the source of brand equity and are defined as customer-based brand equity. The different brand assets are collectively described by the brand image—the customers' views—and comprise brand awareness, brand associations and brand resonance/loyalty (D. A. Aaker, 1996; Kapferer, 2012; Keller, 2013). Keller summarises that customer-based brand equity "...occurs when the consumer is aware of the brand and holds some favourable, strong and unique brand associations in memory" (1993, p. 17).

The variety of identified brand association constructs (see Table 3) gives an overview of the multiple dimensions of customer-based brand equity. As described by Bastos and Levy (2012), the phenomenon incorporates various facets.

The basic building block is brand awareness, the most explicable part of brand equity. The different concepts of consumer brand equity largely agree on its existence and its characteristics—the ability to recognise and recall a brand (see Section 2.1.2). This also applies to the B2B brand literature, which discovered the relevance of brand awareness on market success and found that this awareness is generated mainly through personal interaction (Alexander et al., 2009; Bendixen et al., 2004; Persson, 2010; Schmitt, 2011; Yoon & Kijewski, 1996) (see Section 2.3.2).

As described in Section 2.1.4, brand associations represent a generic term for all subtopics, whereby each subtopic (brand reputation, brand values, brand personality, etc.) comprises favourable factors. The current B2B brand literature has uncovered various favourable factors (see Section 2.3.2 or Appendix F for an overview). On the other hand, the defined categories/subtopics (company, product, service, support, distribution and relationship) (Mudambi et al., 1997; Persson, 2010) refer largely to the classical marketing mix and have been found not to grasp the comprehensive nature of a brand.

The consumer literature defines brand resonance as the uppermost reachable stage, which represents loyal customers who actively engage with the brand (Keller, 2013). As in the B2C market, the halo effect leads B2B customers to recommend the brand and to consider other products it offers (Bendixen et al., 2004). In a B2B context, the relationship is per se interactive (Ballantyne & Aitken, 2007; Ford, 2002b) and seems to be largely influenced by personal interaction (Borghini & Cova, 2006; IMP-Group, 2002). Brand resonance appears to be embossed mainly by partnership (Kuhn et al., 2008). Moreover, the people interact on behalf of the corporation and the resonance is built mainly in relation to the corporate brand (Kuhn et al., 2008; Mudambi et al., 1997; Van Riel et al., 2004).

In this sense, customer-based brand equity, in a B2B context, is characterised by loyalty to the corporate brand and is the culmination of customer's assessment about the company, the product and the related performances (Gordon et al., 1993). Customer engagement with the corporation is therefore not a result but a requirement of the

customer, who prefers a close relationship (Persson, 2010). The corporate brand builds the bracket for the interactive relationship in which people interact and influence perception of the brand. The people involved therefore play a decisive role in determining the brand's perceptions and relationships (Lamons, 2005). Nevertheless, impersonal aspects such as corporate brand communication, perception of product attributes (Persson, 2010) and statements by network participants (Mälaskä et al., 2011) also influence the customer's brand awareness and brand associations. The favourable factors identified so far and the defined categories describe favourable characteristics of a company, the relationship and the partial performances.

2.4.3 Research context

Based on the literature review, research in the B2B context needs to consider certain characteristics.

Different participants are involved in the buying process and are defined as the buying centre (alternatively, the decision-making unit); they represent the customer while he or she decides where to buy. While each member of the buying centre acts in the interest of the organisation, each has different functions and responsibilities (Backhaus & Voeth, 2014; Keller & Webster, 2004). The business function influences the focus of interest (Keller & Webster, 2004) and the individual experience that needs to be considered (Voeth & Brinkmann, 2004). The expert knowledge and responsibilities specific to the business function are believed to influence the perspective. The involvement of different business functions seems to vary depending on the phase of the purchasing process (Garrido-Samaniego & Gutiérrez-Cillán, 2004; Hutt & Speh, 2004). This varying involvement during the process will influence what the business function actually perceives about the brand during the process.

Perception is also influenced by the group dynamics of the buying centre, where the brand seems to have a harmonising effect (Wünsche, 2010). This harmonising effect and the influence of the group dynamics will not be specifically considered in this project, as they form their own topics and as such would need a specific focus in order to understand their influence.

In addition to different perceptions of the business functions, perception of the buying centre varies depending on the business context, characteristics of the customer corporation and purchasing characteristics.

Business context aspects are the business types that vary about the brand effect and the relationship intensity (Kleinaltenkamp, 2000; H. P. Richter, 2001). The product market segment and the brand's share of added value affect the relevance of the brand (Caspar et al., 2002). As for the corporation's characteristics, the customer's own quality strategy (M. Richter, 2007) and the size of the customer's corporation (Brown et al., 2012) influence the perception of the buying centre. In relation to the purchasing characteristics, the importance of the brand is influenced by the importance of the buy (C Homburg et al., 2007; M. Richter, 2007). Additionally, the brand's importance appears to vary among the buying types (Willrodt, 2004), which appear in sequence during a business relationship (Grewal et al., 2015). In relation to the environmental influence, prevalent market dynamics and pressure and technological dynamics appear to influence the relevance of the brand (M. Richter, 2007).

Based on the literature review, brand equity is a construct that is created from experiences that are generated during touchpoints (Keller, 2013) and perceived by the members of the buying centre (Kotler & Pfoertsch, 2006).

As indicated by Kotler & Pfoertsch (2006), touchpoints are, on the one hand, generated through direct business interactions (proposals, product delivery, product performance) and after-sales activities and, on the other hand, through corporate marketing activities and indirect network communications (Kotler & Pfoertsch, 2006). Some touchpoints occur in the name of the corporation and others are influenced by the performances of people who act in the name of the corporation. Communication during a touchpoint will be influenced by a sender source (corporate communication, salesperson, etc.), accomplished through a channel (face to face, telephone, email, etc.) and contain a message (Berlo, 1960).

Although the communication is interactive, the focus lies on following a linear approach (Berlo, 1960) and exploring what resides in the mind of the customer. In this sense, the communicated message is understood as the associated brand factor. Therefore, the

touchpoint represents a medium characterised by the sender, the channel and an actual occasion of communication.

To reflect on the customer's perspective and to create the necessary preconditions for developing an understanding of customer-based brand equity, this research project focuses on a specific B2B segment, the complex industrial B2B segment (see Section 3.4 for further explanation).

2.4.4 Research aims

The buying centre represents the customer in a B2B context and consists of different business functions (Backhaus & Voeth, 2014; Keller & Webster, 2004). While the literature offers some identification of the varying business function perspectives (Bausback, 2007; Bendixen et al., 2004; Herbst & Merz, 2011), no research has focused on the influence of the buying centre's characteristics (Klarmann & Fleischmann, 2014). On the other hand, it appears to be of central interest to understand what brand equity constitutes for the individual member and to investigate the differences and similarities of the buying centre member's perceptions (see Q1 Section 1.1) in order to understand customer-based brand equity. Although the favourable factors vary depending on the phase of the purchasing process (Srivastava & Mookerjee, 2004; Thompson et al., 1997) and the literature suggests focusing on the interaction process rather than on the point of sale to influence brand equity (Ballantyne & Aitken, 2007), no research has explored this relationship in a systematic way. To understand the power of the brand, it is important to understand what customers have learned, felt, seen and heard about the brand through their experiences over time (Keller, 2013). Therefore, this research aims to explore the favourable factors and the media through which they are perceived during each phase of the business relationship (see Q2 Section 1.1). The customer experiences a first contact with a brand, forms his or her first impression and has a potential last contact, normally while terminating the business relationship. This last contact does not necessarily present the customer's last touchpoint with the brand, as he or she will continue to perceive brand communication and possibly consider the brand again in the future. The literature has identified different influential sources, such as the sales person (Baumgarth & Binckebanck, 2011; Bendixen et al., 2004; Kuhn et al., 2008; Lynch & Chernatony, 2007), the product (Bendixen et al., 2004; Leek & Christodoulides, 2012; Persson, 2010) and the network (Mäläskä et al., 2011). Since the characteristics of these sources contribute towards a better understanding of the nature of the relationship, this research

project explores the individual media through which the performance of brand equity-generating factors are perceived and are understood to include the occasions of the touchpoints, the sender and the utilised channel (see Q3 Section 1.1).

As concluded from the literature review (see Section 2.3.6), the current literature offers only partial answers to the characteristics of the brand relationship and the buying centre's perspectives, and does not offer any decisive statements about how brand assets are composed in a B2B context or how they are perceived. The first wave of literature about the B2B brand equity concerned itself mainly with examining the relevance of brand in a B2B context; the current literature aims mainly to identify favourable associations from a B2B customer's view. Nonetheless, the results to date have not uncovered any generic brand association subtopics derived from the B2B context that could add to theory development. Furthermore, it is assumed that, corresponding to Aaker's (1996) brand asset "perceived quality", there are brand association subtopics in a B2B context that have the substance to be listed as a sole brand asset. It therefore remains unclear what, exactly, industrial brand equity encompasses (Leek & Christodoulides, 2011). The general aims of this research are to further understand branding in an industrial B2B context and construct a brand equity model from the customer's perspective. The need for model generation from the B2B context is supported by Keränen et al. (2012).

By exploring the entire process's individual perspectives, this project is expected to improve the field's understanding of how customers value brands during the business relationship. By exploring the relationship in a systematic way—by considering the first and last contact of each member—the project aims to improve understanding of brand loyalty and the relationship phases. This procedure aims to clarify what a desirable brand comprises in an industrial context by offering a more diversified view of a favourable brand image. Furthermore, this research strives to identify the inherent brand assets, considering the different perspectives and the nature of the supplier-customer relationship in an industrial context. The exploration will provide more information about the similarities and differences among the business functions; the differences have only been partly identified in the current literature.

A detailed description of the explorative research design is presented in the following chapter.

3 METHODOLOGY

The presentation of the guiding methodology is divided into the following elements.

Section 3.1 outlines the researcher's ontological and epistemological position, which in turn frames the research approach and design as outlined in later sections (Saunders et al., 2009). Here the research approach, strategy and data collection methods and procedures are described and justified, including a critical review of alternative choices. The consideration of data collection includes the declaration of the approach towards the literature review; the rationale for the selection of the cases and participants; and the justification for the selection of data and the data gathering process.

The chapter ends with a reflection on the reliability, validity, generalisability, ethical dimensions and limitations of the accomplished research.

3.1 Ontological and epistemological viewpoint

The researcher's interest, desire and approach to further understand the customer-based brand equity construct are shaped by the view of ontology and the interrelated view of epistemology (Saunders et al., 2009). The ontological position describes the researcher's perspective towards the nature of reality or being, whilst the epistemology determines the perspective of what is seen as acceptable knowledge and how we can obtain knowledge (Willis, 2007). Therefore, this section aims to analyse the author's philosophy and to identify the driving assumptions that influence the composition of the research design for this study.

From a positivist perspective, a real world exists independent of our experience. We can get access to this world by careful observation and recognition of patterns (Moses & Knutsen, 2007). In the view of the positivist, the purpose of science is to uncover correlations and define laws out of regularities (Moses & Knutsen, 2007). The positivist perspective can range from the standpoint that hypothesised regularities can be verified, to that where a hypothesis can only be falsified and can never be demonstrated to be true (Burrell & Morgan, 2009). The main force of attraction of this perspective lies in that it sees it as possible to find the key to a universal truth (Grbich, 2007).

The interpretivist rejects the positivist idea that the same approach as in naturalistic science (for example physics and chemistry) should be used for the social sciences, as

humans cannot be treated as machines or a piece of metal (Willis, 2007). The human reacts to the environment as metal reacts to the environment; nonetheless, the human is also influenced by the subjective perception of their environment (Willis, 2007). From an interpretivist perspective, the positivist approach tends to impose a particular worldview without understanding phenomena (Grbich, 2007). The interpretivist position believes that the human only interprets sensations and does not directly experience the phenomena (Kant, 1968). This description of the interpretivist view represents the beliefs of a strong social constructivist perspective, which emphasises the inaccuracy of social beliefs and that the social beliefs have a greater impact on social reality than reality on social beliefs (Jussim, 1991).

From a weak constructivist perspective it is also acknowledged that people's beliefs create social reality (Jussim, 1991). The weak approach also acknowledges that people's perception may accurately reflect the social reality (Jussim, 1991). From this perspective it appears to be necessary to be able to perceive a social reality to reach a social consensus. Given the nature of this current research topic, this would appear to be a powerful message for the research design.

Corresponding to Lincoln & Guba's (2000) view, the author believes that the social reality is created mainly by community consensus that define what is useful, what has meaning and what is "real". From this constructivist view the social phenomena are largely formed by the meaning making activities of groups and individuals around the various phenomena (Bryman & Bell, 2003; Lincoln & Guba, 2000). It is also assumed that people recognise a current state of social reality (Jussim, 1991). The social reality created through community consensus is also shaped by social beliefs. However, the human perception is not seen to be merely based on individual interpretation and gained knowledge is not seen to be limited to an individual perception or interaction.

The nature of knowledge is embossed by the consensus derived from the fusion of the individual reconstructions (Lincoln & Guba, 2000). Furthermore, knowledge is accumulated by experiences and more informed and sophisticated reconstructions (Lincoln & Guba, 2000). The constructivist view also implies that social phenomena and categories are not only produced through social interaction, but that they are in a constant state of revision and may change (Bryman & Bell, 2003). Knowledge can therefore be seen as a framework representing the accumulated individual perspectives, which is

constantly being reviewed through actions and experience that adds new or corresponding information. In agreement with Ackermann's (2001) layout of Jean Piaget's approach to research and constructivism, the focus of this research is on gaining an understanding of the individual and or the contextual perspective in order to uncover consensus and deviations and construct an assimilating pole; also recognising that knowledge is under constant revision and can change through deviating experiences (Ackermann, 2001). Moreover, the research design focuses "... on what people, individually and collectively, are thinking and feeling, and attention should be paid to the ways they communicate with each other, whether verbally or non-verbally" (Easterby-Smith, Thorpe, Jackson, & Lowe, 2008, p. 59).

3.2 Research approach and design

Corresponding to the underlying philosophy of the author, which is outlined in Section 3.1, the research questions aim to develop a general understanding of customer-based brand equity phenomena by considering the individual perspectives, the ways of communication and the individual experiences. The aims on their part determined the approach chosen and the design.

This section starts by describing and justifying the approach, proceeds by presenting the reasoning for the utilised methodology and explains the reason for the selection of the considered methods.

3.2.1 Approach

The research project follows an inductive approach by accomplishing an exploration.

Corresponding to the aim of the research, the inductive approach helps to gain understanding of the meaning humans attach to events (Saunders et al., 2009). In contrast to the deductive approach, which mainly aims to test a predefined theory (Bryman & Bell, 2003), the inductive approach will develop theory out of the created data and therefore develop theory out of the industrial B2B context (Saunders et al., 2009).

An exploration is known to be effective in looking for patterns (Easterby-Smith et al., 2008). The exploratory study is seen to be a valuable means for finding new aspects and assessing phenomena from a new perspective (Robson, 2002). On the other hand, an exploration does not guarantee that new aspects will be uncovered, as an exploration is a

journey with uncertain outcome (Saunders et al., 2009). An exploration helps to clarify understanding and discover the precise nature of a phenomenon (Saunders et al., 2009).

Therefore, the inductive approach by exploration offers a good pre-condition for discovering what resides in the minds of the participants and helps to focus on brand equity phenomena in an industrial B2B context.

3.2.2 Research strategy

The research toolbox offers several possible research strategies that can be selected to explore a phenomenon (Easterby-Smith et al., 2008). Some of the most applicable strategies are compared here for their contribution to achieve the research objectives and to answer the defined research questions. The section closes by defining the most suitable strategy and disclosing its contribution and constraints.

One considerable strategy is co-operative inquiry, a form of action research that is based on the premise that the best way to learn about an organisation or a social system is to change it (Easterby-Smith et al., 2008). The paradigm of separating the roles of a researcher and the subject (the participants) is broken down (Heron, 1996).

[...] In its most complete form, the inquirers engage fully in both roles, moving in cyclic fashion between phases of reflection as co-researcher and of action as a co-subject. In this way they use reflection and action to refine and deepen each other. (Heron, 1996, p. 19)

The group of researchers and participants are generally sharing experientially generated data on some aspect or aspects concerning the specific inquiry topic (Heron, 1996). The analysis is accomplished by research cycles where the group collects the findings and sorts them into categories (themes) (Heron, 1996). The aim of the research strategy is to test ideas and findings in the real world and is concerned with re-visioning the understanding of the world and seeks to transform practice within it (Reason, 1994).

The group reflection—by presentation, describing and identifying themes and building theory (Heron, 1998)—is believed to have a high potential to lead to highly differentiated insights about the industrial context and the view of brand equity. Uncritical subjectivity can be challenged directly during the process (Heron, 1996). In a group session the

company politics and power interrelations are believed to have a strong influence on what is mentioned and what is not (Reason, 1994). Emotional factors are assumed to be particularly difficult to discuss in a group consisting of company members. The aim of this research project is not to change the behaviour, but rather understand the phenomenon and explore the viewpoints of the participants.

A further participative research strategy with high potential to explore participants' views is ethnography. This strategy assumes that the researcher will immerse into a setting and become part of a group in order to fully understand the meanings and significances that people give to their behaviour and that of others (Easterby-Smith et al., 2008). The main rationale lies in the finding that a group develops its own language formed by past experience, which is difficult to understand without being part of the group (Easterby-Smith et al., 2008). The focus of this strategy is on gaining insight into the context that the people are in and to understand and interpret it from the perspective of those involved (Saunders et al., 2009). By entering into the everyday lives of people, it is assumed that better understanding of their beliefs, motivations and behaviours will be attained (Tedlock, 2000). Implementation can reach from observing the participant to observing the participation (Tedlock, 2000). The main emphasis is on communicating the participants' experiences (Willis, 2007).

The challenge on the one hand is to find a setting that will enable full access (Saunders et al., 2009). On the other hand the challenge is to build trust and cope with being a full-time member of the group while simultaneously undertaking the research (Saunders et al., 2009). According to the identified aspects of the strategy, the potential to uncover underlying brand equity factors by referring to experiences and to be familiar with the particular language of the group seems very attractive.

A further, more autonomous strategy is the case study. The design of a case study consists of three steps (Yin, 2012). The first step is to define a case. "A case is generally a bounded entity (a person, organisation, behavioural condition, event, or other social phenomenon) [...]" (Yin, 2012, p. 6) The case is the main unit of analysis and shall be either distinctive or defined through a framework. The second step is to select one of the four case study research designs. The design is on the one hand defined by either a holistic or an embedded approach and on the other hand is either a single case or a multiple case design. The rationale for a single case is normally argued through the case being a critical,

extreme or unique case (Saunders et al., 2009). The third step is to decide to use or not to use theory to develop the methodological steps as the research questions, selection of cases, refining case study design and to define what data is relevant for collection.

The described design steps offer a large scope of possible focus, which is also seen to be one of the challenges to using this strategy. Particularly, the definition of what a “case” is, is seen to be a challenge (Yin, 2012).

Owing to its holistic nature, a case study is good methodology to explain group attribute patterns and the structure of processes (Verschuren, 2003). It is also a good strategy to gain rich understanding of the context of the research and the process being enacted (Morris & Wood, 1991). The case study is also recommended to receive answers to why, what and how (Saunders et al., 2009). Yin (2009) emphasises that the applicability of answering the questions why and how and when requires an extensive description of a social phenomenon. The case study strategy is good for understanding everyday practices and their meaning to those involved (Cassell & Symon, 2004). The case study strategy also helps to disassemble phenomenon from the context (Yin, 2009).

Within a case study there are two main approaches to capture how people begin, maintain and end brand relationships (Otnes, Ruth, Lowrey, & Commuri, 2006). A longitudinal approach, studying a case at different points in time, helps to disclose how certain conditions change over time (Yin, 2009). The focus is on some type of change in a particular unit of analysis and the relationship between the events (Otnes et al., 2006). The retrospective approach, on the other hand, allows the acquisition of primary recollections and opinions about past events and their relevance to the present (Otnes et al., 2006). With regard to that, the focus of the exploration is about disclosing what is in the mind of the customer and not about the alteration of a particular unit of analysis or the relationship between events. A retrospective approach appears to be the most expedient.

To answer the defined research questions and achieve the objectives (see Sections 1.1 and 1.2), a case study with a retrospective approach seems to be the most suitable. Furthermore, a multiple case study is selected to discover whether the findings of the first case occur in other cases (Saunders et al., 2009). The similarities of the subunits (the different business functions) are of particular interest. The analysis of the subunits is on

the one side part of the case analysis. Nonetheless, the data of the subunits is directly compared with data of comparable subunits of the other cases. Therefore, the detail design of the multiple case study follows an embedded and a holistic approach (Yin, 2009) by exploring the similarities and differences of the cases and the subunits (see Chapter 4). One of the cases offers the benefits of an ethnographic strategy, since the researcher was part of the organisation during the exploration.

A multiple case study also offers the possibility to identify patterns, to compare the findings, and to discover if the patterns are replicable in other cases (Yin, 2009). A single case or even a few cases are unlikely to be a strong representation of others (Yin, 2009). The strategy does not aim to nor does it deliver any direct result that offers the qualification to define any generalising statement. The insights rather result in assertions that are discussed in relation to the current body of knowledge (Stake, 1995). The discussion of the corresponding and contrasting aspects either results in confirming or questioning the existing insight and therefore offers the potential to add new perspectives (Stake, 1995).

The decision on strategy defines the route of the journey. The selection of suitable methods (tools) defines how the route is carried out and therefore has a considerable contribution towards the outcome of the journey.

3.2.3 Method

As defined in Section 2.1.4, brand equity is represented by high familiarity and favourable brand associations in the minds of the customers, which result from experiences over time (Keller, 2013). To understand the power of the brand, it is important to understand what customers have learned, felt, seen and heard about the brand from their experiences over time (Keller, 2013).

The method to collect the data therefore needs, in some way, to enable discovery about what, in the minds of the individuals, their favourable brand associations are and through what experiences they are formed.

The questionnaire method is widely used in business management. The questionnaire method is defined as a method where a set of predefined questions are asked to each participant, either by a structured telephone interview or by a questionnaire that is handed

out for self-completion (Saunders et al., 2009). The questionnaire method is widely used for surveys, which aim to collect comparable data and accomplish quantitative data analysis (Saunders et al., 2009). This method is not frequently used in a case study and only as a complementary method (Yin, 2009). A questionnaire is recommended for the execution of standardised questions and is not recommended for an exploration with a large amount of open-ended questions (Bryman & Bell, 2003; Saunders et al., 2009).

A common method in case studies is observations. This gives insight about some of the relevant behaviour or environmental conditions and possibly results in receiving more information about the influencing aspects of the context (Yin, 2009). However, the method is very time consuming and could be biased as people possibly behave differently when they are being observed (Yin, 2009). Observations are seen to mainly offer further information about the context (Yin, 2009).

A further and one of the most essential methods in case studies are interviews (Yin, 2009). According to King (2004), the goal of a qualitative interview is to understand how and why the interviewees come to have a particular perspective. One main advantage of the interview is that the focus on the research topic can be controlled and therefore maintained during the exploration (Yin, 2009). The interview method is one of the most powerful ways to understand humans (Fontana & Frey, 2000). The quality and focus of the interview are largely influenced by how the interviewer guides the interview process (Yin, 2009). The two main types of qualitative interviews are the unstructured and the semi-structured interview (Bryman & Bell, 2003). For an unstructured interview, the interviewer most possibly utilises an aide-memoire as backup to ascertain that a basic range of topics is covered (Bryman & Bell, 2003). The interviewee may have only one opening question and the rest of the interview is guided through relevant topics that arise (Bryman & Bell, 2003). The semi-structured interview utilises a basic interview guide, which ensures that specific topics are covered (Bryman & Bell, 2003). The prepared structure can be left and other new and relevant aspects, which come up during the interview, can be followed (Bryman & Bell, 2003). In both cases the emphasis is on what the interviewee considers to be important about events, patterns and forms of behaviour (Bryman & Bell, 2003). The described framework and the interest of the research call for a semi-structured interview approach. Furthermore, a certain structure helps to ensure a cross-case comparability during a multiple case study (Bryman & Bell, 2003).

3.2.3.1 The adapted critical incident technique

One structuring element is found in the critical incident technique approach. “The critical incident technique is a qualitative interview procedure, which facilitates the investigation of significant occurrences (events, incidents, processes or issues), identified by the respondent...” (Chell, 2004, p. 48) The aim of the critical incident technique is to gain an understanding of perceived effects from the viewpoint of the interviewee, taking into account cognitive, affective and behavioural elements (Chell, 2004). This technique is a good approach for connecting context, strategy and outcome and it looks for repetition in patterns (Chell, 2004). This approach has also been successfully applied by Gremler (2004) to study customer-perceived value. On the other hand, this technique needed to be adapted in relation to the aim of this research project (see also Section 3.6).

As in Chell’s (2004) description of the critical incident technique, an arrow was drawn on a single page to help the interviewee in this research project to think about a sequence of events. Nonetheless, the interviewee was not asked to define the point of “here and now”; the interviewee worked backwards, marking events. Similar to Mudambi (1998) who applied this technique to identify the steps and influences that occur during the purchasing process, the interviewees were asked to depict the process and describe the steps of the process. The arrow serves as a means to go through all of the touchpoints that the interviewee generally experiences with supplier brands, starting with the first and ending with the last potential contact. The aim of the interview is to receive a complete overview of all the relevant touchpoints during the relationship. The other difference lies in the procedure by which the events during the timeline are explored.

According to the description by Chell (2004), the interviewee is asked to mark critical events. For this research project, the criticality of the touchpoint is identified by asking the interviewee to rate the relevance of the event. Moreover, any interest in critical aspects comes up while exploring the interviewee’s perception at the identified individual touchpoint. Each of the previously defined events is treated as a setting to explore influential experiences (negative and positive). The touchpoint is influenced by a sender source (corporate communication, salesperson, etc.) and is accomplished through a channel (face to face, telephone, email, etc.) and contains a message (Berlo, 1960).

A recognised disadvantage of the critical incident technique is that the technique requires the interviewee to reconstruct a past procedure or event, but the interviewee may possibly

not be able to recall all of the events (Chell, 2004; Flanagan, 1954). However, critical events are assumed to be recalled well (Chell, 2004). Accordingly, the potential risk to miss some of the relevant touchpoints and inherent influential events is not seen as particularly critical since influential touchpoints are assumed to reside in the mind of the interviewee.

In addition to the adapted critical incident approach, three supporting methods are utilised in the sense of a methodological triangulation (Bryman & Bell, 2003; Yin, 2009). These additional methods serve to verify and complement the identified brand association factors identified from the adapted critical incident approach.

3.2.3.2 Free association technique

Before exploring the relationship, the interview includes a starting section based on the free association technique and continues with a projective technique described by Keller (2013). In contrast to the adapted critical incident technique, which aims to achieve a general picture of an entire business relationship, these complementary techniques explore the association of specific brands.

The free association technique is utilised as it is one of the most powerful techniques for profiling brand associations (Keller, 2013): for example, by the valence and type of associations (Koll, Wallpach, & Kreuzer, 2010). For this research project, previously identified supplier brands are defined and visualised on a piece of paper on which the comments of the interviewee are directly noted during the exploration (see also Section 3.6.1).

3.2.3.3 Projective technique

Then the projective technique, based on the same visualised supplier brand, follows. This technique finds its usage in the business-to-consumer market to capture the personality of a brand (Azoulay & Kapferer, 2003), is seen to be helpful in overcoming communication barriers and appears to encourage respondents to discuss more private motives (Steinman, 2009). Concerning the organisational environment and the formalised process of the industrial context (Backhaus & Voeth, 2014; W. Johnston, J. & Lewin, 1996), this technique has been found to be promising for identifying more underlying associations (see also Section 3.6.1). The projective technique is an approved technique

and is helpful for uncovering topics that the respondent would possibly see as socially unacceptable or topics about which the respondent is not able to express or identify (Keller, 2013).

3.2.3.4 Summary technique

To achieve a summary of the thinking process and possibly a weighting of associations, the interview ends with the interviewer asking the participants to state what they consider to generally be the most important for a supplier.

Within all four techniques the frequency (Keller, 2013; Koll et al., 2010) and the sequence (Keller, 2013) in which the identified associations appear are considered to define the degree of influence. The following applied technique focuses on exploring the variety of perceptions of the buying centres.

3.2.3.5 Awareness and ranking

To explore the variety of perceptions within the buying centre, in particular the variety of awareness, the participants are asked to define up to five suppliers that come to mind (D. A. Aaker, 1996; Keller, 2013). The participants are then asked to rank each supplier's relative performance and to create a ranking list based on the supplier's overall performance. Performance is defined as the overall performance, meaning a summary of the interviewee's view of the corporation and the corporation's partial elements such as the product portfolio and pre- and after sales.

The adapted critical incidence method is seen as suitable for exploring what is in the mind of the interviewee and the complementary methods offer the possibility of uncovering further potential variety and themes and/or validating the findings. Hence, the described approaches—the strategy and the defined methods as shown in Table 16—complete the research design.

Table 16: Research approach and design

Frame	Approach	Justification
Approach	Inductive (exploration)	-Remote knowledge of customer-based brand equity -Focus on developing an understanding of the perspective of the customer and the brand equity phenomenon to confirm or possibly add new perspectives to the existing body of knowledge
Strategy	Multiple case study with a retrospective approach	-Enables focus on daily practice and the meaning, the process, aspects influencing perspectives, identify characteristics of the brand equity phenomenon, focus on what is in the mind and help disassemble phenomenon from context -Comparison of perspectives of the business functions -Comparison of results in relation to case context
Method	Semi-structured interview (Adapted critical incident technique) Complemented with: -Free association technique -Projective technique -Summarising question Brand awareness and ranking	-Gain understanding of the individual perspective considering cognitive, affective and behavioural elements -Investigation of touchpoints and critical factors during the timeline -Identification of patterns -Triangulation of methods to validate results -Identification of the potential variety of the brands in mind and uncovering the potential variety of the individual's preference

Author's own construction

The defined research approach and design aims to develop the understanding of customer-based brand equity by exploring the individuals' perspectives and their experiences throughout the relationship in multiple cases. The multiple case study is seen to offer the necessary frame for exploring the phenomena by considering the process, the perspectives and the case context. The comparison is believed to identify general and business function-specific brand equity patterns. The selected method is seen as a suitable technique to explore the touchpoints and the critical factors throughout the relationship from the individual's viewpoint. The triangulation of methods offers a basis to validate the findings.

A further complementary method is the consideration of the involvement of the researcher as an active participant during the research process. Corresponding to the description of

the researcher's standpoint towards epistemology, the aim of the research should focus on the individual's view (see also Section 3.1). As stated, knowledge is formed through activities of individuals. Therefore the researcher, acting as both the initiator and the one accomplishing the research, needs to consider his own influence on the process and the knowledge produced (King, 2004). To facilitate a reflection about this aspect, a research diary is carried to record feelings about the process (King, 2004). The diary, which starts with an entry about the researcher's presuppositions, is extended every six months or whenever it is necessary to note an important insight. Section 3.6 describes the researcher's involvement during the data generation process and Section 3.7 the procedure of analysis.

A further influential action, which forms the basis of this research project, is the procedure of the literature review. To disclose how the literature review is accomplished, the procedure is described and justified in the following section.

3.3 Literature review – approach and procedure

A literature review aims to determine the existing body of knowledge about a particular topic (Tranfield, Denyer, & Smart, 2003). This sub-goal of a research project forms on the one hand the frame in which the research is accomplished (Tranfield et al., 2003) and on the other hand serves as a basis to discuss the results in an inductive manner (Saunders et al., 2009). These aims and the described purpose disclose the importance and influence of this milestone for a research project, which calls for a thoughtful approach. Therefore it is believed that this milestone needs to be treated as a research project on its own. To be effective it needs clear aims and a basic structure in its procedure.

The main elements of the systematic literature review approach by Tranfield et al. (2003) seem suitable and serve as a basic guideline for the accomplished review. The literature review has clear aims and objectives, follows pre-planned search methods, discloses the criteria for selection of literature and presents the current knowledge in a clear framework (Tranfield et al., 2003). The relevance and quality of selected literature are individually assessed. Corresponding to the critique outlined by Bryman & Bell (2003), it does not seem constructive to utilise predefined criteria to judge the quality and relevance of the literature in order to ensure the inclusion of sensible literature. As suggested by the critical review process of Saunders et al. (2009), the search terms considered are continuously refined through upcoming insights to ensure that the relevant knowledge is identified.

As previously described, the literature review is directed by a specific aim and follows a defined method to identify relevant literature. As defined in Section 2.4, the main and leading question is to discover: “What constitutes customer-based brand equity in complex industrial markets?” The aim and procedure are derived from this basic question. The literature review is accomplished by an iterative process. Every step has its individual aim and leads to the next as shown in Table 17.

Table 17: Literature review process

Step	Aim/objective	Search terms	Complementary terms
1	-Identify current findings and concepts	-B2B branding -B2B brand equity -B2B Markenwert	-B2B brand management -B2B brand value -B2B brand
2	-Clear understanding and definition of brand equity	-Brand equity -Brand value -Markenwert -Brand -Marke	-Brand assets -Brand image -Customer-based brand equity
3	-Clear understanding of the B2B/industrial context	-B2B markets -B2B management -Industriegütermarketing -B2B marketing -Industrial marketing	-Buying centre -Decision-making unit -B2B sales process -Buying process -B2B relationships
4	-Review literature in light of the discovered B2B/industrial context and the defined brand equity construct -Identify gaps -Develop specific research questions, which develop understanding		
5	-Define research design	-Qualitative research -Constructivist research approach -Qualitative methodologies -Qualitative methods	-Case study -Multiple case study -Qualitative interviews -Critical incident technique

Author’s own construction

The first step aims to learn about the existing findings and concepts of brand equity in a B2B and, more specifically, industrial context. The search starts by using obvious basic terms and continues with more specific terms, influenced by the studied literature. The various findings and the described models initially appeared rather disconnected, which initiated the aim to receive a clear understanding and definition of what brand equity incorporates. Corresponding to the first step, the first search terms are complemented with further more specific search terms according to the first learning from the consulted literature. The outlined definition of brand equity forms the first pillar, which induces the aim to develop a clear understanding of the B2B and industrial context. As during the previous steps, the specific relevant topics discovered by studying the literature and the complementary search terms are added. Based on the understanding gained about the two

main pillars—brand equity and the B2B/industrial context—the literature from step 1 is reviewed again to identify gaps and develop specific questions to develop the current understanding of brand equity in a B2B context. Two sources provided further valuable input for relevant literature. First, the identified literature provides valuable indications to other pieces of cited work. Second, the extensive literature reviews by Keränen et al. (2012), Leek & Christodoulides (2011), M. Richter (2007) and Bausback (2007) provide a valuable overview of the current body of knowledge and references to relevant literature.

After defining the research questions, the next area of interest is to learn about the current state of methodologies and methods to answer the formulated questions. As of the nature of my ontological position, the questions and the nature of the topic, literature in the qualitative area is of interest. By the fifth and last step shown in Table 19, the basis for the research design is accomplished.

Through this process, the foundation for the consideration of the existing body of knowledge is accomplished. In the following section, the approach to selecting the cases for the empirical research is described.

3.4 Selection of cases

Based on the literature review and the developed framework, the perception of the buying centre is influenced by the business context, the corporate characteristics and the purchase characteristics (see Section 2.4). This pattern served to select the individual cases for the multiple case study, which aims to explore replication and also predict, to a certain extent, contrasting results (Yin, 2009). The case selection is therefore embossed by a purposeful approach utilising the criteria from the composed framework to study the phenomenon (Bryman & Bell, 2003; Yin, 2012). Moreover, the multiple case study aims to explore the particularities of the phenomenon in different environments (Stake, 2006).

To have a comprehensive base from which to explore the aspects of brand equity, the basic selection criteria are defined by the purchase characteristics. Therefore the research project delimits the exploration to complex industrial markets, namely to customer-supplier interactions where the supplying brand has in some way accomplished a minimum of added value (intermediate goods). Additionally, the research focuses on purchases of items that are integrated into the customer's product and are delivered to the

customer's customer. These guidelines are believed to foster the two main brand functions of "risk reduction" and "information efficiency" (Caspar et al., 2002) and will ensure focus on purchases with a high relative importance (C Homburg et al., 2007; M. Richter, 2007).

The limitation to business with purchases of a minimum added value is seen to foster the information efficiency function as the purchase is more likely to be of a complex nature (Caspar et al., 2002). Additionally, a higher value increases the perceived risk (Caspar et al., 2002). The perceived risk is seen to be higher for items that are integrated, as failure is directly perceived by the customer's customer and the decision for a brand needs to be justified towards the own customer (Mudambi et al., 1997).

As derived from the literature review, the perception of the buying centre possibly varies depending on the business type (Bausback, 2007; Caspar et al., 2002; Herbst & Voeth, 2006) and the size of the company of the customer (Brown et al., 2012). To be able to compare and explore replication and differing characteristics, the procedure of selection aims to include different business types and sizes of companies. Therefore one case needs to represent a larger company. Based on the models of Kleinaltenkamp (2000) and H. P. Richter (2001), the business relationship is influenced by the specificity and or the integration degree. Therefore one of the cases needs to represent a "corporate business"/"customer integration business" and one must represent a business case with a low integration/specificity degree. The selection will consider that businesses with standard items appear to differ among businesses that need additional services and businesses without the need (Kleinaltenkamp, 2000).

To improve the premise of understanding and develop a comprehensive case study, the researcher's familiarity with the subject (Wright, Millman, & Martin, 2007) and the accessibility to the company is taken into account (Yin, 2009). To improve the accessibility, and given the constraints of time and cost, the selection focuses on companies close to the researcher's home city (Yin, 2009). Moreover, the company (particularly the top management) needs to support the inquiry and be willing to comment on the first results of the analysis, which is seen as a necessary attitude for a promising case study (Yin, 2009). To improve the understanding, the researcher's familiarity with the industrial B2B context is considered and the search for potential cases limited to

geographical areas that speak the researcher’s native tongue; namely German-speaking countries (Wright et al., 2007).

Based on the defined selection criteria (Table 18) and the aimed variety, the cases represent industrial companies that mainly purchase products or components that have a minimum of added value and are used to complete the customer’s own product. The cases represent different business types and sizes of companies, are willing to participate, speak German and are based in or near the German-speaking part of Switzerland.

Table 18: Criteria for selection of cases

Selection criteria
-German-speaking part of Switzerland or areas geographically near Germany or Austria -Part of the industrial B2B segment -Purchase complex (minimum of added value) components to integrate in own product -Willingness to active participation
Aimed variety
-Variety of main purchased item (business) types -Company size

Author’s own construction

Corresponding to the selection of the cases, the selection of the participants also followed a purposeful approach (Yin, 2012) (see Section 3.5). As the buying centre is normally not institutionalised, can be formed informally and the composition can vary depending on the purchase situation (Hutt & Speh, 2004; Lewin & Donthu, 2005), the selection was defined individually in co-operation with the top management. The buying centre members are defined by the people involved in the decision for purchase of intermediate goods with a high relative importance (Lewin & Donthu, 2005) and or high added value (Caspar et al., 2002).

Finding businesses that were willing to participate and which fitted with the outlined limitations and the defined variety, emerged to be a challenging although feasible task. Three to five cases were found to represent a good basis to reach the defined research objectives and consider the intended variety. Out of the 17 contacted companies, four agreed to participate and fortunately represented the aimed variety.

3.4.1 Approach for contact and clarification of case relevance

Potential companies were evaluated through the personal network of the author and through internet researches. Through the company’s homepage, its membership towards

the industrial B2B segment and its location were assessed. Depending on individual access to the company, 17 companies were identified and contacted through the main phone number or directly through a personal contact. In all cases, a specifically created flyer explaining the research project was sent to the contact person to clarify the interest. Depending on the competence of the first contact person, whether the company purchases complex goods to implement in its own product was directly verified. Otherwise, this criterion was verified after receiving an answer by email. In all cases, the final contact person was found to be one of the middle or top management. The research procedure was discussed with this contact person and detailed information regarding the company context was collected during the first meeting (see Section 3.6).

In the sections 3.4.2 to 3.4.5 the analysed cases are described towards their structure, business activities, products, type of purchase, organisation, the buying centre and the brand communication.

3.4.2 Case 1 - context

Case 1 is the first case explored during the research project. As the researcher was part of the organisation during the time of the research, an extraordinary familiarity with the context of the case is pre-conditioned. This pre-condition helps towards understanding the context and offers the benefits of an ethnographic research by having better understanding of the motivations, behaviours and company-specific language (Tedlock, 2000).

Case 1 is a public company based in Switzerland and is part of a corporate group. The company is a medium-sized company with about 120 employees and had a turnover of 35 MCHF in 2012. The company is managed by a management team and the owner of the company is the president of the supervisory board.

The company is one of the top European sensor manufacturers in some of their particular market segments. The global distribution is accomplished through its own subsidiaries, sales representatives and distribution partners. In addition to the production facility in Switzerland at the headquarters, production and assembly facilities exist in China, U.S.A. and Sweden.

The sensors are used for activating and safeguarding applications. The applied technologies include infrared, radar, inductive, tactile and compressed air technology. The company develops, manufactures and sells these sensors as one of the major components to system manufacturers and directly to installers or service providers. The manufacturer focuses on assembling the devices and performing the final test of the end product.

As the company focusses on the assembly and end testing, the suppliers deliver intermediate goods and mechanical components that are needed for the assembling and also provide electronic manufacturing services. The main part of the purchased components and the intermediate goods comprise specifically designed components, which are developed jointly with suppliers.

The chief marketing officer (CMO) is responsible for marketing, product management, customer order management, service and support and all of the employees in the sales organisation. The chief technology officer (CTO) is responsible for the development team and the testing department. The chief operative officer (COO) is responsible for the purchasing, production, production preparation and logistics. The chief executive officer (CEO) is in charge of the overall strategy and is responsible for profits and losses. Responsibilities and tasks are appointed to the different business functions and departments. In addition, the processes are also described. Therefore, the decisions are taken by a defined group of business functions.

In this business in case 1, a total of five people are involved in decisions regarding suppliers; they are from the top management as well as the purchasing, quality management and engineering departments. The head of purchasing and the member from top management have the final decision. The purchaser and the engineering department influence which suppliers are considered while the quality management has an impact on the internal reputation of the supplier.

The brand states to value long-term partnerships with customers and that know-how and innovation have been the basis for success over the last 50 years. Furthermore, they underpin their capability of innovation and know-how through the claim “sensing the future” placed on the product overview.

As the company focuses on the assembly and testing of the products, they rely to a large extent on the performance of their suppliers, which implies an intense collaboration with their suppliers.

3.4.3 Case 2 - context

Case 2 is part of the same corporate group as case 1. This means that the company is owned by the same person who sits on the supervisory board. Besides the ownership, usage of the same SAP licence, support of case 2 by case 1 in some administrative work (such as accounting and personnel administration) and that they are located in the same building, there is no active exchange. This means that there is no overlap concerning strategic and operative business issues. Up to the current time of executing the interviews, there were no activities to integrate the purchasing activities by using synergy effects.

Case 2 is a company based in Switzerland. As previously mentioned, it is part of the same corporate group as case 1. The company is owned by the same person, but due to the size is managed through one CEO and not by a team. Their yearly turnover reaches 24 MCHF, which is realised with 84 people of which 14% work in engineering and more than 50% work in production.

Their main turnover is realised in Switzerland where they design and produce electrical control and drive technology for process and automation solutions for the industry. They have recently opened another production facility in the Czech Republic. For the past 45 years, this group has been delivering a substantial part of an automation investment. Their main competence lies in consulting, project management, software and hardware engineering, process visualisation and manufacturing switch cabinet solutions. The market is processed directly by the CEO with support from the project managers.

Production is focused on assembling control boxes and programming of the PLC. The components purchased to assemble a control box are usually standard products, as opposed to being specifically designed. In this analysed case, the customers occasionally define what suppliers (manufacturers) will be considered for particular components.

The company is divided into engineering, production, production preparation and purchasing, whereby the engineers are also the project managers and work partly in sales. One of the main functions of the CEO is sales.

The buying centre depends on the project, whereby the CEO is always part of it and the purchasing function is merely executing the orders. To gain an overview of how they perceive suppliers and what they value, two engineers from the hardware and software areas, who both also work as project managers, were interviewed. As the main decision maker, the CEO also participated. The decisions are taken on a project-specific basis, considering economics of scale and trying to decide upon products that can be applied in different projects.

The brand states that continuous improvement forms the basis for the common success. They mention developing open and flexible solutions in close co-operation with the customer. Their company values are open communication, mutual appraisal and being successful in the team.

This company offers customer-specific solutions, but normally uses standard products and devices to assemble the end product. The buying centre is largely dependent on the functionality of the standard products of the supplier brands. Furthermore, this case is believed to offer some insight into the perspective of a small and very practically driven company.

3.4.4 Case 3 - context

Case 3 represents the case with the highest variety of business functions and offers some insight into the particularities of a family owned and managed business.

Case 3 is a family owned business, managed by the family for more than 60 years. The second-generation family members, the brother and the sister, are currently in charge. The company has its base in Switzerland. With 60 employees and a 10 MCHF turnover, it is one of the many small companies in Switzerland. Most of the people (60%) work in production with 20% in the development team; the remainder are divided equally between sales and administration. Their stated purchasing volume of 4 MCHF, which is even mentioned in their sales brochure, fits with their statements of what customers can expect from them, namely transparency.

They are active internationally in diverse sectors, developing and manufacturing specialised machines and components. They have a product range for the graphics

industry, where they have established themselves as a recognised global market player in the advanced paper processing. The company has been the market leader in a specific machine application for more than 40 years. Additionally, they construct machines for assembling and packaging of wall calendars, books and book block fabrication. The second pillar is the “integrated production” sector, where they offer a wide range of machine construction services.

They have a deep value creation and manufacture the machines in Switzerland. The purchased components range from raw material to tailored manufactured parts and standard products. The sales team is located at the headquarters and approach potential customers directly. Their customers are worldwide.

Five people influence the decisions for a supplier and two decide. The company is divided into three main departments. Directly headed by top management is the finance department, which also incorporates the human resource and marketing function. During the interviews it was recognised that marketing is part of the finance department, but is not actively managed. The salespeople, also connected to the finance department, seem to be very independent and one of them is actually part of the extended management team and even a member of the board. The second department is the production department, which also incorporates the purchasing function and is headed directly by the management team. The third department is the development team, also headed directly by the management team.

The structure gives the impression that the company has a team culture, which has also been underpinned by comments of the interviewees. It seems that the management team discusses a lot, but that the last decision is taken by top management (the sister and the brother). Although in some cases the participants are officially in charge of different business functions, they appear to be appointed to one main business function. The classification appears to be clear as the topics mentioned during the interview focused mainly on one of the areas.

The brand states that the customer can expect partnership, transparency, the fulfilment of individual customer requirements, flexibility, a short decision-making process and a high degree of innovation.

The company has a high manufacturing capability, which is believed to give a certain independence concerning mechanical components. The electronic products, purchased and integrated into their machine system, will have a long-term availability and a switch to another brand would be costly and time consuming.

3.4.5 Case 4 - context

This case represents a larger company and is the only company from Austria. All except one of the second interviews were accomplished at the company facility.

Case 4 is a public company based in Austria. The whole group comprises 790 employees with a turnover of 130 MEUR. The company has existed for more than 45 years. The company is managed by a management team and is divided into two main divisions, the industrial automation and the banking and services automation division. As this research is focussed on the industrial B2B market, the industrial automation unit is analysed.

This division markets control system solutions for industrial segments such as injection moulding of plastic, robotics and machinery. They are active worldwide with subsidiaries in several countries. They offer control units, I/O modules, drive controllers, software solutions and handling tools. They therefore offer a system solution by offering components and software that can be put together to an individual solution for plant machinery and control of robots.

The products are designed, produced, assembled and distributed by the company. In this case the deepness of the added value is even higher than in case 3, as the company has its own electronic manufacturing production lines. The electronic purchasing is mainly concerned with talking to component suppliers. Standard hardware modules and specified mechanical components are also purchased.

This division is divided into the following departments. The international and area sales department, key account management, product development, branch development, application development and services. The two business function groups involved in the decision about a supplier are the purchasing and the engineering departments. In this case, a list of approved suppliers exists, which is normally first consulted when looking for possible suppliers of a particular component. The engineering group orientates themselves with that list, yet still has the option to suggest another supplier that is not on

the list. The purchasing group is more independent, looking for potential suppliers for their existing components. The buying centre is accomplished by task-specific teams and not by any institutionalised buying centre. The task-specific teams seem able to execute decisions and purchasing is divided into mechanics and electronics.

The brand states to drive success through technological innovation, exacting quality standards, a dynamic approach and the enthusiasm of their employees. Their objective is to create lasting competitive benefits for their customers. The mission of their technology is to help make the world a good place to live and the working world easier.

3.4.6 Overview of analysed cases

Each of the cases is defined from a purposeful approach (Yin, 2012) and represents a key case (see Table 19). The selection is derived from a created theoretical framework (see Section 2.4) and represents exemplary cases of the industrial business type characteristics (G. Thomas, 2011). The number of cases selected (four) is seen to represent a good number for accomplishing an extensive multiple case study and to explore replication and deviating patterns (Yin, 2009).

Table 19: Overview of explored cases

Case	Characteristics of purchase	Characteristics of company	Characteristics of business context
1	Highly integrated components	Corporation of 120 people and part of a group	Selling standard components to system providers
2	Standard products	Corporation of 84 people and part of a group	Selling customised control systems for machine parks
3	Standard products	Family owned and managed corporation of 60 people	Selling standard and customised machines (investments)
4	Standard components	Business unit of a corporation with 790 people	Selling handling devices and systems

Case 1 develops and produces products in large quantities, sells these products as a component to system providers and purchases mainly highly integrated components that result from co-operative development. Case 4 develops and produces handling devices and systems to control machines for the manufacturing industry and purchases mainly standard components. Through the deep added value that the company in case 4 accomplishes on its own and the low requirement of additional services, the company seems to be the most independent compared to the other three cases. Case 3 develops and manufactures a standard assortment of machines, as well as machines specific for

customer requirements. They purchase mainly standard products, although they also purchase tailored manufactured parts. Case 2 is a system provider, which designs and installs control boxes that control production lines; they assemble standard modules into a control box and program the purchased control unit (standard product) for the customer's requirements.

As required, the size of the companies vary; two cases represent small- to medium-sized companies (case 2 & 3), one a medium-sized company (case 1) and one represents a larger corporation (case 4). Furthermore, two cases (cases 2 & 3) purchase mainly standard products that require additional services; for example, training courses. The other two cases (cases 1 & 4) purchase mainly components, of which one (case 1) purchases highly integrated components.

In addition to the defined selection criteria, the cases offer a wide range of different business contexts. One company is family owned and managed. Three companies are based in Switzerland and one in Austria. Three of the companies are internationally active and one mainly does business locally in Switzerland. Furthermore, one case offers standard components to system providers, one offers customer-specific systems, the other offers standard and customer-specific machines (investments) and the last offers a system with modular standard products. This variety of business context and the different focus of the communicated brand values are believed to represent a good balance and variety of the industrial business context. The cases (and in particular case 1) were approved to represent cases with a great opportunity to learn, as the participants throughout the cases were committed to participate.

As described in Section 2.4, the aim of this research is to understand the brand equity perspective of the buying centre members. All four buying centres exist of individual buying centre members who have a business function within the company. The detailed selection process of these buying centre members, the participants, is presented in the following section.

3.5 Selection of participants

As derived from the literature review and defined through the research questions and objectives, the frame for the selection of the participants is predefined (King, 2004). As described in Section 2.4, the aim of this research project is to understand what constitutes

customer-based brand equity in complex industrial markets. Factually, the corporate body is the legal entity that is paying for supplies and therefore presents the ultimate customer in the industrial B2B context. The corporate body is directed by people mainly represented by the management team. The management generally delegates the buying decision for supplies to a specific group of people, namely the buying centre (Backhaus & Voeth, 2014) (see Section 2.2.2). This buying centre is therefore the main entity of interest and is defined to represent the customer's perspective. This buying centre is composed of employees, which implies different business functions (Backhaus & Voeth, 2014).

To select the participants who form part of the buying centre, a purposeful approach (Yin, 2012) was undertaken. As the buying centre is normally not institutionalised, can be formed informally and the composition can vary depending on the purchase situation (Hutt & Speh, 2004; Lewin & Donthu, 2005), the selection needed to be defined by the purchasing situation and individually for all four cases. As risk reduction is one of the main brand functions (Caspar et al., 2002), the buying centre members are defined by the people involved in the decision for purchases with high relative importance (Lewin & Donthu, 2005) and or high added value (Caspar et al., 2002). Corresponding to King's (2004) selection criteria, the selection process aims to represent the variety of perspectives of a buying centre and the evaluated business functions will provide a certain overlap to explore patterns.

To define the involved buying centre members, the management was asked to define the members that are involved in decisions that concern their main product. The main product is defined as the product with either the highest volume and or the largest profit contribution. This initial categorisation helped to initiate a discussion about which employees are involved in important purchase decisions. Only for case 1 is the buying centre defined by a product. In case 2, since the company does not offer standard solutions, the possible members involved vary depending on the project. For this reason, the management defined three members who had been involved in the recent largest projects. In case 3 there is a defined group of people who are involved in all risky purchase decisions. In case 4 the corporation could not define a main product with the highest volume and or the largest profit contribution, although the company offers standard products. The products represent modules of solutions that make it difficult to decide the

most important product. Therefore, the main deciders and all possible business functions that directly contribute to the decision are considered.

The composition of the buying centre business functions varies for each case (see Table 20). In all cases the engineering function is part of the defined buying centre members. The purchasing function is included in three of the four cases. Management in case 2 did not consider the purchasing function relevant, as the purchasing function mainly serves as an assistant to engineering and merely has an implementing role. Overall, the main identified business functions (engineering, purchasing and management) fit with the finding of Garrido-Samaniego & Gutiérrez-Cillán (2004) and Lilien & Wong (1984). Throughout the four cases the variety of business functions comprises the purchasing function, quality function, management function, sales function and the finance function. The number of defined participants varies from three to five and includes two to five different business functions.

Table 20: Criteria for participant selection

Case	Criteria for selection	People	Functions involved
1	Main product (volume, profit)	5	Purchasing, engineering, quality, management
2	Involved members for recent largest project	3	Engineering, management (sales)
3	All involved members for risky purchase decisions	5	Purchasing (production), engineering, management, sales, finance
4	Typically involved members for purchase decisions	5	Purchasing, engineering

Author's own construction

The variety and the analogy with findings of previous work are seen to fit with aimed criteria of variety of perspectives and the theoretical interest (King, 2004). The identified business functions represent the subunits, which are utilised on the one hand for an embedded analysis to understand phenomena in a case specific context (Yin, 2009). On the other hand the subunits serve to analyse the phenomena through a holistic perspective throughout all cases (Yin, 2009).

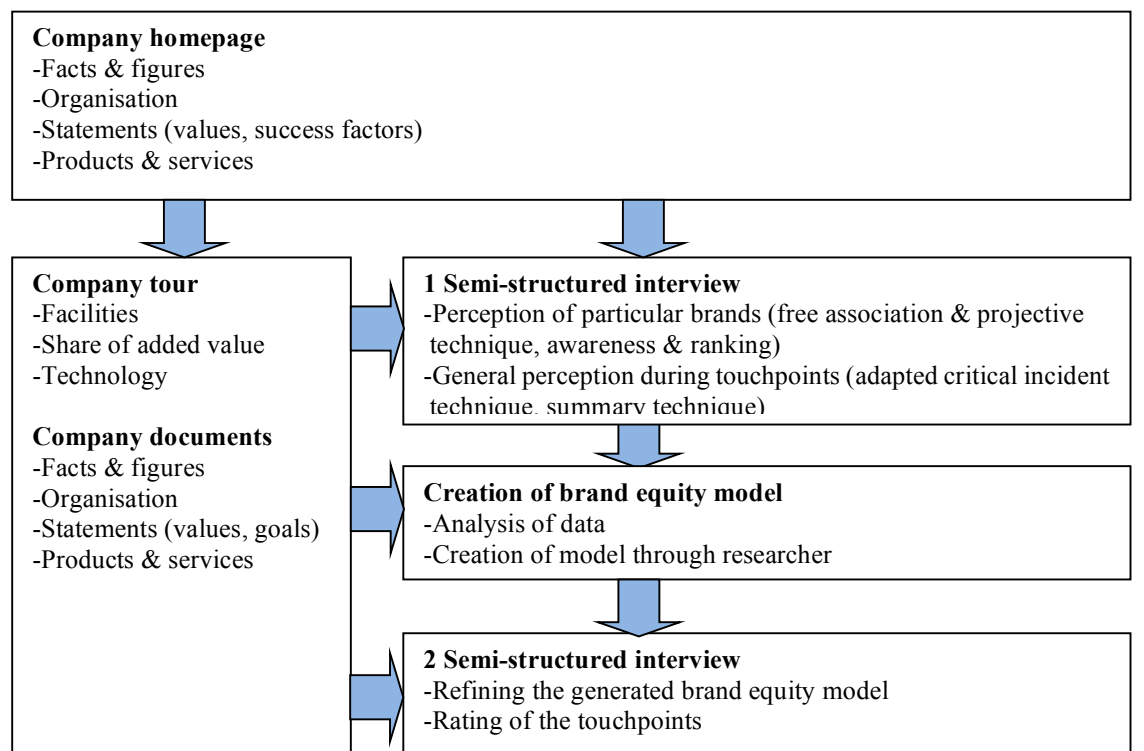
The defined participants fortunately all agreed to take part in two interviews. Anonymity was assured on the one hand to protect the participant from any harm that could result from the interview (Bryman & Bell, 2003). On the other hand, anonymity should support the interviewee feeling comfortable to talk about feelings and underlying aspects during the interview and prevent that the interviewee acts in a culturally accepted way. The

participants were given the option to sign an informed consent after the second interview and were given the right to withdraw certain data that would then be handed over and disposed of.

3.6 Research data and generation procedure

As defined in Section 3.2.3, the main source of primary data was obtained through semi-structured interviews utilising an adapted critical incidence approach. The process also included some pre-study and some attendant analysis to have a good basis for understanding the case context, which was further improved throughout the process. This data gathering process is outlined below (see Figure 8).

Prior to visiting the company, the secondary data from the homepage offered invaluable information that provided basic ideas about what topics were to be expected and therefore also offered some indication about possible questions (Yin, 2009). Further preliminary clarification with the management of the company defined the participants (see also Section 3.5) and the procedure of the agenda. Management also defined the four most relevant supplier brands that needed to be evaluated in advance in order to have a basis for the utilised free association and the projective method. The suppliers were defined in agreement with the management on behalf of the added value contribution considering the realised purchase turnover and the contribution towards the functionality of their own product.



Author's own construction

Figure 8: Sources for data generation and process

The inspections in cases 3 and 4 of the company buildings, the offices and production facilities allowed an overview of the technical operations and therefore also offered some indication about possible topics and questions. Since the researcher was familiar with the facilities and production in cases 1 and 2, this procedure was not carried out. Further, company documents were studied. This secondary data included sales brochures, sales presentation, company presentations, organisational charts and product information, which comprised information about the case context.

The interview process started with a first semi-structured interview utilising some of the critical incident techniques described by Chell (2004), which is presented in detail in the following section.

The main outcome of the interview is a co-created visualised composition of the relationship process, illustrating the touchpoints (incidents) and describing the perceptions of the participant (behaviour, expectations, tasks, requirements, etc.) during the touchpoints. In the sense of a methodological triangulation, the results from the critical incidence approach are compared with the results of the free association and projective

techniques described by Keller (2013). A summarising question aims to weight the themes (Bryman & Bell, 2003; Yin, 2009).

The interview language was German or a Swiss-German dialect, depending on the language spoken by the participant. The interview produced audio data by recording the entire interview, which was transcribed in German.

The recorded interviews were transcribed according to the guidelines of Dresing & Pehl (2013) using the “simple transcription system”. The amount of time needed to transcribe the interview record, analyse the data and create a draft of the individual model amounted to about 2 to 3 months.

The generated model was verified in a second interview that lasted approximately 20 minutes. The main aim of the second interview was to ensure that the identified themes represent the participant’s perspective and to possibly modify the model and or complement themes.

The process of both interviews is described in detail below (Section 3.6.1).

3.6.1 First semi-structured interview

The first semi-structured interview utilised four methods overall to explore what the interviewee perceives and what resides in their mind. The interview was formed by following a general setup (see Table 21). All of the first interviews were accomplished face to face and at the place of the participant’s employment. The face-to-face approach is seen to help gain trust (Easterby-Smith et al., 2008) and the location is helpful since it is the main scene for touchpoints. The interview focused on perception of the supplier brand, and the participant was not informed about the precise aim of the research. The term brand or brand equity was not utilised so as to not encourage the participant to derive any assumptions and act in a culturally accepted way (Bengtsson & Ostberg, 2006). All participants were asked the main pre-defined questions to ensure a comparable basis for the analysis (Bryman & Bell, 2003). See also Appendix A.

To open the interview, the participant was asked their name, their function and their responsibilities within the company. This information serves to define their function within the company, help differentiate their function towards the other buying centre

members and is utilised to identify similar functions throughout the cases. These easy and descriptive questions help the interviewer and interviewee become acquainted with each other and feel more comfortable (King, 2004).

Table 21: Procedure of first interview

Parts	Topic	Aim	Questions/Tasks
1	Unaided awareness and preference (1)	Explore differences of the buying centre members	-List 4–5 suppliers that come to mind (1.1) -Rank the suppliers towards the general performance (1.2)
2	Free association technique behalf of brand logo (2)	Explore favourable associations	-What do you think (or feel) about the company? (2.1)
3	Projective technique (3)	Explore underlying favourable associations	-With what car brand would you compare the supplier? (3.1) -Why did you choose this car brand? (3.2)
4	Touchpoints and experiences during customer-supplier relationship process (4)	Identify touchpoints Discover favourable factors during the touchpoint	-On what occasions do you have any kind of contact with the supplier (first – last)? (4.1) -How did you perceive the supplier on these occasions? (4.2) -Can you describe any positive or negative experiences? (4.3)
5	Importance of touchpoints (5)	Identify the most influential touchpoints	-Which of the listed touchpoints are the most important touchpoints (two to three) (5.1)
Part 6	Summary of thinking process and possibility for weighting (6)	-Identify relevance of themes	-What is most important for a supplier? (6.1)

Author's own construction

The first main part of the interview aims to examine the buying centre member's awareness (1) of the possible supplier brands by asking the participants to list 4 to 5 supplier brands (1.1) (D. A. Aaker, 1996; Keller, 2013). To explore whether there are relative differences in perception among the buying centre members, the participants were asked to rank the mentioned supplier brands towards the overall performance (1.2) (D. A. Aaker, 1996). Some of the participants perceived it as difficult to compare the suppliers. They felt it difficult to abstractly rate the overall performance as performance is seen to be particular and not directly comparable. All of the participants were able to accomplish the ranking by acknowledging that the ranking represents fulfilment of specific needs and general behaviour of the supplier.

The second part is based on the free association technique (2) described by Keller (2013) and is seen to be one of the most powerful ways to profile brand associations. In this technique four previously defined and printed supplier brand logos are presented to the participant. The participant is then asked about what comes to mind (2.1) when they think

about the supplier (brand) (Keller, 2013). In some occasions it was difficult for the participant to give any opinion as they do not have any direct experience. However, these participants were able to describe the brand indirectly based on what they have heard or read about the supplier brand. The third part is an integrating part of the second and uses the developed basis to explore further underlying associations.

The utilised projective technique (3) is seen as a good technique to uncover sources of brand equity (Keller, 2013). This technique is successful especially in situations where the participant feels it unacceptable or undesirable to express their true feelings (Keller, 2013). In this case the participant is asked to compare the presented brand with a car brand (3.1) and subsequently asked about why they had made this comparison (3.2) (Keller, 2013). This comparative approach is seen as particularly helpful for exploring underlying imagery associations (Keller, 2013).

The fourth part utilises an adapted critical incident technique to investigate the process of the relationship by identifying the touchpoints and uncovering the experiences and the perception of the participant. Similar to the research of Mudambi et al. (1997), the participant is asked to draw the process (4) showing important steps and various influences during the process (4.1). The visualised process aims to represent the whole business relationship and is extended to the last potential contact with a supplier brand. In this case the interviewer drafted the line, placed the touchpoints and noted the most important aspects of the touchpoint regarding the participant. According to the recommendation of Chell (2004), an arrow drawn on a single sheet is used to help the interviewee think about a sequence of events. The aim is to receive a complete picture of all relevant touchpoints and to discover what is perceived during this contact. As a starting question, after identifying a touchpoint, the participant is asked about what they perceived during the touchpoint (4.2) (Chell, 2004; Keller, 2013). Corresponding to the critical incident technique approach, the participant is asked to describe some positive or negative experience (4.3) (Chell, 2004; Keller, 2013) in the case that the participant remained to describe the process in a descriptive manner. The result from this part is a timeline showing the touchpoints and some notes describing important aspects during the touchpoint.

During the fifth part (5), the co-created timeline is taken as a basis to define the most influential touchpoints by asking the participant to define from the visualised timeline the 2 to 3 most influential touchpoints (5.1).

At the end of the interview (6), the participants are asked to state in a few sentences what is most important for a supplier (6.1). This last question aims to achieve a summary of the thinking process and to provide an indication about the relevance of the identified themes.

The targeted interview length was 60 minutes, which is seen to be the average minimum time needed for a qualitative interview (Saunders et al., 2009). However, the target length had to be reduced to 45 minutes as—in contrast to the experience of Saunders et al. (2009)—the participants and management were reluctant to invest the amount of time.

The execution reveals that the actual time needed for the interview is influenced by the number of touchpoints the participant experiences or has in mind and how talkative the participant is. A few of the participants seemed to be under time pressure and were therefore rather brief in their descriptions. The average interview time was approximately 52 minutes with a range between 34 and 95 minutes (see Table 22).

Table 22: Overview of first interview (participants and duration)

Case	Business functions	Duration
1	Head purchasing	44 min 14 sec
	Purchasing	55 min 01 sec
	Management	38 min 06 sec
	Technician	50 min 22 sec
	Quality	35 min 12 sec
2	Management	1 h 35 min 27 sec
	Technician (hardware)	34 min 36 sec
	Technician (software)	43 min 56 sec
3	Management	55 min 07 sec
	Sales	1 h 08 min 41 sec
	Technician	59 min 40 sec
	Purchase (production)	54 min 42 sec
	Finance	44 min 09 sec
4	Head purchasing electronics	57 min 41 sec
	Head purchasing mechanics	1 h 08 min 44 sec
	Head Technician	46 min 19 sec
	Technician (Component Engineer -1CE)	52 min 22 sec
	Technician (Component Engineer -2CE)	42 min 02 sec

Based on the data generated from the first interview, an individual brand equity model was drafted that illustrates the touchpoints, the rating and the identified brand association

factors (see Appendix B). This first model is discussed in a second shorter interview as presented below (Section 3.6.2).

3.6.2 Second interview - review of draft brand equity models

The second interview aims to ensure that the analysed themes are interpreted correctly and that the overview represents the view of the interviewee (Aronson, 1994; Chell, 2004). See Table 23 for procedure. To improve validity the second interview did include disclosure of the aim, an explanation of the draft and a joint review of the draft brand equity model and the identified brand association factors (Bryman & Bell, 2003).

Table 23: Procedure of second interview

Parts	Topic	Aim	Tasks
1	Disclosing the aim of the research	To be transparent	Explain the aim and reason for not revealing
2	Explanation of how the draft model is created	Ensure that participant understands the procedure of how the draft is created	Explain the procedure and what is presented in the draft model
3	Verification of the identified associations and review of importance ranking	Ensure that the draft model represents the participant's perspective	Go through each of the identified brand association factors and how it is derived Ask if the participant can confirm the identified brand association factors

Author's own construction

The confession at the opening of the second interview about the aim of the research did not surprise the participants and most immediately understood the motivation behind it. For the second interview the draft brand equity model, presented as a table, was given to the participant and the procedure of the analysis explained. To indicate the basis of how the brand association factors were identified, the leading statements of the participant from the first interview are presented next to the factors. With this presented information, the identified brand association factors of each touchpoint were reviewed with the participant. The rating by the participant during the first interview and the complemented rating by the researcher were also reviewed and possibly modified.

The targeted interview length of 20 minutes was generally exceeded since the discussion of the factors led to some fruitful dialogue (see Table 24). The review process was revealing as some of the identified factors needed elaboration to fit the participant's perspective and in some cases further complementary factors were incorporated.

Table 24: Overview of the second interview (participants and duration)

Case	Function	Duration
1	Head Purchasing	26 min 57 sec
	Purchasing	15 min 41 sec
	Management	23 min 40 sec
	Technician	18 min 22 sec
	Quality	26 min 05 sec
2	Management	32 min 15 sec
	Technician (hardware)	22 min 51 sec
	Technician (software)	18 min 15 sec
3	Management	24 min 13 sec
	Sales	31 min 34 sec
	Technician	29 min 09 sec
	Purchase (production)	19 min 50 sec
	Finance	21 min 45sec
4	Head purchasing electronics	24 min 57sec
	Head purchasing mechanics	29 min 54sec
	Head Technician	32 min 46sec
	Technician (Component Engineer -1CE)	22 min 36sec
	Technician (Component Engineer -2CE)	14min 43sec

The average duration of the second interview was approximately 24 minutes with a range between 15 and 32 minutes. The second interview, although recorded, was not transcribed.

The procedure of analysis for the first draft model and the further analysis are discussed below (Section 3.7).

3.7 Procedure of analysis

The description of the procedure is outlined by defining the units of analysis and continues to define “what” has been analysed. It also describes “how” the data was analysed. The section ends by describing each step of the procedure.

As described in Section 3.2.2, the multiple case study aims to look at the individual cases by focusing on the perception of the subunits, namely the business functions, and in a second step by exploring the case in a holistic manner. After the case-specific analysis, the subunits are analysed throughout the cases and the analysis ends in a synthesis from a holistic multiple case perspective.

According to the research questions and objectives, two main aspects need to be identified. One aspect is the brand association factors and the other is the media (touchpoints), which are also expected to indicate a pattern of phases throughout a

business relationship. The identified brand association factors are then analysed in comparison to the phases and the business function perspectives.

To identify these aspects the analysis utilises pattern coding (Yin, 2012). A first-level coding, summarising segments of data, is accomplished in advance (Miles & Huberman, 1994). On this basis the pattern of themes is created that serves to identify brand association factors (Miles & Huberman, 1994). To identify particular phases the pattern of the causes/explanations of the touchpoints are the subject of focus (Miles & Huberman, 1994). This approach of analysis is also found to be described under the term thematic analysis (Grbich, 2007; Joffe & Yardley, 2004).

Literature explaining or defining thematic analysis seems to be quite limited (Braun & Clarke, 2006). It is often mentioned as a subtopic of content analysis but, as defined by Grbich (2007), has a different basis for analysis. “Thematic analysis (...) is a process of segmentation, categorisation and relinking of aspects of the database prior to the final interpretation.” (Grbich, 2007, p. 16) “This approach to qualitative research insists that the data should speak for itself initially, before any predesigned themes are imposed.” (Grbich, 2007, p. 32) The thematic analysis allows an explorative approach regarding the analysis of the data as it focuses on identifiable themes of behaviour (Aronson, 1994) during the analysis. As the thematic analysis offers a high degree of freedom, there is a challenge to minimise the impact of the researcher’s view (Grbich, 2007). Therefore it is important that the analysis discloses how themes are explored and that the procedure be consistent (Braun & Clarke, 2006).

Accordingly, the accomplished steps disclosed in Table 25 ensure the comprehensibility of the analysis.

Table 25: Procedure of brand association factor analysis

	Step	Data	Analysis	Aim
Adapted critical incident technique	1	Transcribed interview text of each participant	First level coding of each touchpoint: Summary of positive & negative participant experiences, considering attributes and behaviour	Basis for thematic analysis
	2	Summary from first level coding	Thematic analysis of each touchpoint/occasion	Overview of individual perspective (factors throughout business relationship)
	3	Generated overview (draft brand equity model)	Joint analysis (with participant) of overview	Ensure view is described
	4	Reviewed brand association factors	Analysis of frequency of brand association factors	Receive weighting of factors
Supporting techniques	5	Notes & audio file of: -Free association technique -Projective technique -Summarising question	Thematic analysis	Identification of brand association factors
	5	Identified brand association factors: -Free association technique -Projective technique -Summarising question	Analysis of the sequence and frequency of the identified factors	Receive weighting of factors
Triangulation	6	Weighted brand association factors: -Adapted critical incident technique -Free association technique -Projective technique -Summarising question	Triangulation & comparison of results in relation to business function and case context	Summary and weighting of factors (business function)
Case analysis	7	-All brand association factors (all techniques) per case	Analysis of frequency of brand association factors	Top factors of techniques
	8	-All brand association factors (all techniques) per case	Analysis of business function-specific factors, considering frequency & importance	Main business function-specific factors of case
	9	-Top factors (frequency) of case -Main business function-specific factors of case	Analysis and synthesis	Refined case-specific brand association factors
Holistic analysis	10	-Business function association factors (all techniques) of all cases (engineering, purchasing, management)	Analysis of frequency of brand association factors	Business function brand association factors

Author's own construction

The analysis of the brand association factors is divided into five main parts. The main analysis consists of examining the data that has been generated with the adapted critical incident technique. The transcribed interviews have been coded using the touchpoint as the starting point. During coding, both favourable and unfavourable themes are considered. Unfavourable themes are marked as it is assumed that the reversal aspect

would be seen as favourable. To gain an overview of the themes, the data is deduced into categories by using a block-file approach (Grbich, 2007). Additionally, the interviewees' most important touchpoints are rated in a block by the value three. Touchpoints where the interviewee mentions many aspects or where terms such as "important" are mentioned are rated with the value two. The value one indicates that the touchpoint has been in the mind of the interviewee and is therefore seen as relevant.

The overview (model)—see also Appendix B—which comprises the medium of each touchpoint, the coded aspects, the first deduced brand equity factors and the rating of the relevance of the touchpoint is subsequently discussed with the interviewee in a second interview. The second interview aims to ensure that the analysed themes have been interpreted correctly and that the overview represents the view of the interviewee (Aronson, 1994). The document is revised together in the interview, going through each touchpoint and discussing the rating and the deduced factors. After the second interview, the text is supplemented as needed.

Examination of the supporting techniques builds the second analysis part. Based on the notes and the audio files, a thematic analysis serves to define the individual brand association factors. The statements of the participants consist mainly of descriptive attributes.

Along with the inherent touchpoint rating, the frequency (Keller, 2013; Koll et al., 2010) of the identified themes throughout the relationship and the frequency and sequence (Keller, 2013) of mentioned attributes during the free association, projective and the summary techniques serve to identify the intensity of the brand association factors. To achieve an indication of the relevance of the identified factors, the frequency and sequence per factor and rating per touchpoint are analysed.

The triangulation of data from the four techniques serves to refine the weighting and defines the basis to summarise the main brand association factors of the individual business function of each case. The main case-specific brand association factors are defined by a cross analysis, which considers the identified brand association factors of all buying centre members of the case. To reach a comparable basis, the analysis describes equal factors by the same term. Moreover, some of the specific terms that appear to be of value for describing the individual perspective are grouped under an umbrella term in

order to define the case or the holistic business function brand association factors. This is only accomplished in the case that one of the defined terms is found to represent a suitable umbrella term. The aims are to not create any new terms and stay as close as possible to the originally defined terms and at the same time to reach a merging of the various identified factors. The final analysis considers the main brand association factors of the main identified business functions and aims to define the business function perspective from a holistic cross-case perspective. All of the themes and factors are subsequently re-analysed—looking for similarities and general topics—by using conceptual mapping (Grbich, 2007).

To achieve an overview of the factors in relation to the touchpoints in the context of a specific case, a case-specific mind map is created (see Appendix C). This overview serves as the initial position to join the same touchpoints of the buying centre members, to identify phases (see Table 28) of the process and, if needed, further refine the identified factors. Furthermore, this basis also serves to identify the main categories of the identified factors. This approach of conceptual mapping is a common tool to visualise the interrelation of the analysed themes (Grbich, 2007; Powell, 2007).

Table 26: Procedure of touchpoint analysis

Step	Data	Analysis	Aim
1	-Transcribed text of participant -Visualisation of process and touchpoints	Identify the reason for touchpoint, the source, the channel and the perceived factors	Individual overview of the business relationship
2	All individual overviews of the business relationship of one case	Analysis of similarities and differences	Case-specific overview of the business relationship
3	Case-specific overview of the business relationship	Analysis of -reason per touchpoint to identify phases -pattern of sources and channels -frequency of brand association factors	Case-specific phases including main factors, the sources and channels
4	All four case-specific phases including main factors, the sources and channels	Analysis of -reason per touchpoint to identify phases -pattern of sources and channels -frequency of brand association factors of brand association factors	Holistic phases including main factors, the sources and channels

Author's own construction

The analysis of the touchpoints starts with examining the individual visualisation of the process and also considers the transcribed text. The reason for the touchpoint, the source, the channel and the perceived factors are of interest to define the individual viewpoints

of the business relationship. The individual, identified touchpoints serve to define case-specific phases and thereby enable the analysis of frequency of grouped brand association factors. Moreover, the cumulated rating of the touchpoints offers an indication of the relevance of the defined phase. This approach is repeated from a holistic perspective and has thereby merged all four case-specific phases, including the main factors, sources and channels.

To keep an overview of the analysis, an Excel database (see Appendix D) was created to define the frequency of the refined factors and to identify the main influential factors in relation to the cases, the business functions, the phases and the categories. Wherever sensible, the insights are relinked with the database—which is a quality of thematic analysis (Grbich, 2007)—to support the understanding of the underlying source.

The definition and justification of the analysis approach completes the research toolbox that has been utilised. In the following section (Section 3.8), the selection and execution will be examined from a retrospective perspective.

3.8 Reflection on research design, applied methods and procedure

The general explorative approach is found to be successful for two reasons. On the one hand the approach enables a wide range of factors to be identified, which builds the basis to discover patterns. On the other hand the approach also forms the basis for discovering what occasions resonate in the mind of the customer. The main challenge is to treat every interview and each case with a unique perspective and not adulterate the next interview or case during the interview or while accomplishing the analysis. Particular sensitivity is required during interview phases when the process appears to be stagnating and needs some promotion to reactivate the process. The positionality of the researcher also influences the outcome (Chavez, 2008) and as it is not possible to be neutral, it is important to be open about the position (Davey & Liefoghe, 2004). In this research project, the researcher is described as an insider of the industry and was part of the organisation of Case 1 during the interview phase. On the one side being an insider is helpful for accomplishing a nuanced analysis through having a more equalised relation between the researcher and the participant and having a more nuanced perspective (Chavez, 2008). This nuanced perspective results in a nuanced analysis, which results in a large variety of identified brand association factors. This variety provides an optimal basis for identifying patterns. Nonetheless, the variety and similarity of the elements also

increases the complexity for capturing patterns and is challenging for illustrating the findings without losing richness of the variety. Moreover, the subject-object positionality and the premise of being familiar with the context is found to be challenging for recognising patterns (Chavez, 2008).

Chavez (2008) also mentions the risk of selective reporting through the subject-object positionality. On the other side the actual characteristics of the researcher's insider positionality offers advantages. As an experienced product manager, it is common to explore customer perspectives. Further, the product manager's function within the organisation needs a certain sensibility for the needs of the different departments. Nevertheless, it cannot be precluded that the experience did influence the interview process and the analysis of the text. After carefully reflecting on the research process, there is no doubt that the researcher's positionality influenced the outcome of this research. The research is influenced by the researcher, but through a reflective approach the outcomes also influence the researcher's perspectives (Bourke, 2014). As a matter of fact, the driving motive for exploring the different perspectives originates from the experience of being a product manager and the insight that technical product benefits do not lead to enduring success. This hidden agenda has the potential to have biased the outcomes and to have biased the reporting in a selective manner. On the other hand, awareness of this matter and the approach taken ensures an optimal sensitivity throughout the research process and leads to specific steps being taken to account for and ensure that reliability and validity are optimised – see Section 3.8.1.

Besides acknowledging the positionality, recognising the driving motives in advance and applying the necessary sensitivity during the process, the accomplished second interview ensures the necessary certainties to illustrate the perspective of the participant. At least the joint review ensures that no conflicting aspects are listed. Moreover, the triangulation with the supporting techniques and the analysis of multiple cases is found to help reflect on the findings (Yin, 2009).

A further issue of the explorative approach is that the researcher is left with an underlying fear of missing important aspects that are not identified through either the limited time resources or the limitation of his own capability of perception. This limitation is independent of the approach and the utilised strategy and the imperfection needs to be generally acknowledged.

The multiple case study strategy enabled some contextual variations to be uncovered and has helped identify some overlapping aspects concerning the process, the involved business functions and the valued factors. Particularly, the identified contextual variations could not have been derived without a close link to the individual case context and being able to compare the findings with the other cases. The influence of the customer's market presence is seen to be particularly interesting and further research in this area is believed to offer a potential to increase understanding of the brand equity construct.

The selection process of the participants provided some insight of how buying centres are organised. Somewhat surprising to notice is that some companies are not able to define the most profitable product. In retrospect, it is plausible that a system provider thinks mainly in projects and in second priority thinks about the profit of each applied product. The second company selling products and systems focuses on solutions and therefore could not define a main product. The defined participants seem to represent the main business functions as the same or similar business functions are identified in all four cases. The existing literature supports the identified main business functions. In retrospect, an extension of the considered participants is seen to offer a deeper understanding about the buying centre members' motivations. The findings point out that the business function values particular task-specific factors and it is recognised that the organisation perceives the decision. An enlargement of the circle of participants could help uncover further influences that drive the self-image of the buying centre member.

The adapted critical incident technique provides an adequate frame to explore the perception of the buying centre members throughout the business relationship. The approach to follow the experiences over time resulted in the observation that during the business relationship, the product functionality and the price only represent a fraction of the entire perceived picture. The results from the complementing free association technique, the projective technique and the summarising question adjusted the weighting and thereby increased the relevance of the product and the price. This finding on the one hand helps acknowledge the relevance of sporadic appearing factors. On the other hand, this relation indicates the importance of understanding the entire relationship and that multiple techniques (triangulation) help to ensure the validity of a research project. Only the combination of the techniques offers the complete picture.

In this context the accomplished analysis approach also influences the outcome. In this case, two main analysis methods influenced the results. To explore the perspective of the participants and identify brand association factors, the thematic analysis turned out to be a suitable tool. In the following step the frequency of the factors and the rating of the interrelating touchpoints serve to identify the main emphasis. In this relation, without having accomplished four different research methods to explore the same issue, the frequency of factors could have distorted the findings. Besides the defined analysis methods, the most influential method to develop the understanding of customer-based brand equity is found in the rumination of the data and the process of writing.

After this more general review describing the main insights, the following section aims to specifically address the issues concerning reliability, validity and the credibility of the generated data and findings.

3.8.1 Reliability and validity

The aim of reliability refers mainly to whether the accomplished research is replicable (Bryman & Bell, 2003). As suggested by Yin (2009), a guideline offers the precondition to have a basis to replicate the research and ensures having comparable datasets for the multiple case study. A database was set up (Yin, 2009) containing audio files, transcriptions of the interviews, notes generated during the interviews, coded transcriptions, the first drafts of the individual brand equity perspectives and a spreadsheet for analysis of frequency. Complementary to the documentation of the generated data, the generation process and the procedure of analysis are outlined in Sections 3.6 and 3.7. Although this documentation ensures comprehensibility for an external audit, it seems challenging for a second researcher to accomplish exactly the same results, as the interviewer has a large influence on the focus and what themes are uncovered (Yin, 2009). It needs to be considered that the outcome of a qualitative research is shaped by the social background of the researcher—for example, personal expertise—(Bryman & Bell, 2003). This applied particularly for case one as the researcher had been part of the organisation during the interview phase.

The aspect of validity is addressed by considering the credibility of the research approach (Bryman & Bell, 2003). On the one hand a triangulation of methods, which was accomplished (Bryman & Bell, 2003; Willis, 2007; Yin, 2009), helps balance the relevance of the identified factors. A multiple case study is seen to be more robust (Herriot

& Firestone, cited by Yin, 2009). On the other hand the generated data from the thematic analysis is validated through the respondent (Aronson, 1994; Bryman & Bell, 2003; Chell, 2004), which also resulted in some refinement of the analysis.

Two aspects give confidence concerning the purposeful selection process. First, the participants are part of a buying centre and second, the participants are involved in important purchase decisions. On the one hand the participants were asked about their role in the buying centre, which offered the opportunity to exchange thoughts about the definition of a buying centre and their experiences. On the other hand, 13 of the 18 participants occupy a leading role in their department, suggesting that a large proportion of the participants are involved in important decisions. The reconciliation with previous work indicates that the main business functions are represented in other work and the differing business functions are believed to offer new insights by extending the variety of perspectives. The involvement of these extraordinary business functions appears sensible in light of the particular case (see also Section 3.4). In any case, the completeness of the relevant perspectives cannot be ensured, since buying centres can be informed informally (Hutt & Speh, 2004; Lewin & Donthu, 2005).

It can be said that the views of the involved participants represent the buying centre's perspectives. The measures executed help illustrate the customer's perspectives through feedback from the participants. In addition, the creation of comprehensive documentation has served to relink the developed factors to the database. The degree of transferability of these findings is limited by the following boundaries.

3.8.2 Generalisability

A basic limitation was the aim to explore customer-based brand equity in an industrial context. Focusing on German-speaking industries within a limited geographical area implies a possible cultural limitation. However, many of the identified factors match factors that have been found in research from other European and non-German speaking geographical areas, as well as more foreign countries such as Australia. The selected cases all describe frequent purchases and therefore do not include purchases about investments or systems. Corresponding to the findings, the customer's business context appears also to have influenced the perception. Therefore, the business context-specific findings correspond mainly to customer companies selling standard components and systems, customised control systems and standard and customised machines.

The findings are limited by the case-specific findings, the cross analysis and the degree of elaboration of particular statements. Nevertheless, the replication logic of the multiple case study encourages the external validity of the results (Yin, 2009). Generalisation in a case study is about an analytical generalisation, which requires carefully constructed claims and intends to generalise to other situations and not to the population (Yin, 2012).

The accomplished multiple case study aims to improve the general understanding of customer-based brand equity and provide a database to make judgements about transferability to other contexts (Bryman & Bell, 2003). The research also strives to develop some essential statements by analytical generalisation and thereby develop the broader theory (Yin, 2009). The discussed brand assets (see Section 5.1), phases (see Section 5.2), the elaborated framework and the model developed (see Section 5.6) are believed to provide further elements to the current understanding of customer-based brand equity in an industrial context.

The ethical issues of the research project are addressed below (Section 3.8.3) and the applied measures described.

3.8.3 Ethical dimensions

The measures taken aimed to prevent any harm to the individual participant and the participating organisation. The research design, the applied methods and the procedure were addressed with the aim of assuming ethical responsibility and preventing any bias of the research outcomes (Stake, 2006). Although the participants were not informed about the exact focus of the research during the first interview—to ensure that the participants would not act in a culturally accepted way (Bengtsson & Ostberg, 2006)—the participants were informed about the focus during the second interview. The participants were informed that the research focus was on brand equity and not on general marketing. The second interview allowed the participants to review the results of the thematic analysis. At the end the participants were given the opportunity to withdraw their participation. With these measures the participants' rights for information about the research topic, aim and the right to withdraw were addressed (Saunders et al., 2009). The participants were informed that the data collected would be treated anonymously and a declaration of consent was jointly signed. With the signed declaration the participant received the transcribed interview and the drafted brand equity model, which was jointly

reviewed to ensure that the participant's view is accurately reflected. To ensure anonymity of the organisation (Saunders et al., 2009), the presentation of the organisation has been limited to a basic description of the activities, goods and services in which the company brand has not been mentioned. The identified supplier brands of each case were also admonished to prevent any conclusion about the corporate brand. Due to the reactions of the participants, who understood the reason for not immediately disclosing the focus on brand equity, the hidden agenda appeared to not have harmed their personal integrity. The participants appeared to be happy and surprised to have received the complete transcribed interview and a first drafted analysis, which they were able to comment on. Based on the reaction and ensuring anonymity the measures taken appear to have cleared the identified ethical issues.

The next section (Section 3.8.2) aims to summarise the unintended inherent limitations of the applied research and suggest potential adaptations for future research.

3.8.4 Limitations

The research design on the one hand helped to answer the research questions and reach the objectives. The findings show that a purposeful selection also limits the considered influences.

The focus of the case selection considered mainly the business types of the purchase. The findings show that the customer's own business context is also influential, which was not in the focus. The selection process of the buying centre members was based on the top management's perspective and focused on the individuals who participated directly in the buying process. On the other hand the findings indicate that the surrounding organisation has a high influence on the behaviour of the buying centre member.

As outlined in Section 3.8.2, the accomplished multiple case study aims to improve the general understanding of customer-based brand equity and strives to develop some essential statements by analytical generalisation and thereby develop the broader theory (Yin, 2009). The purposeful selection approach has helped develop the understanding of customer-based brand equity, has answered the research questions and has allowed the aims to be achieved. The findings indicate that a purposeful approach, based on the created framework, delimits the degree of findings.

For future research it is suggested to more critically review methodological approaches and their impact (Symon & Cassell, 2004), which possibly could have led to a more comprehensive approach and an even higher variety of findings. Following this review, an essential framework approach appears to be more suitable for a future research project. One possible approach is to focus on the behaviour of the person and how their view is influenced and, in a second step, consider the phenomena and the surrounding construct.

In Chapter 4 the accomplished analysis is presented, which describes the case-specific findings and the insights concerning the subunits and the cross analysis.

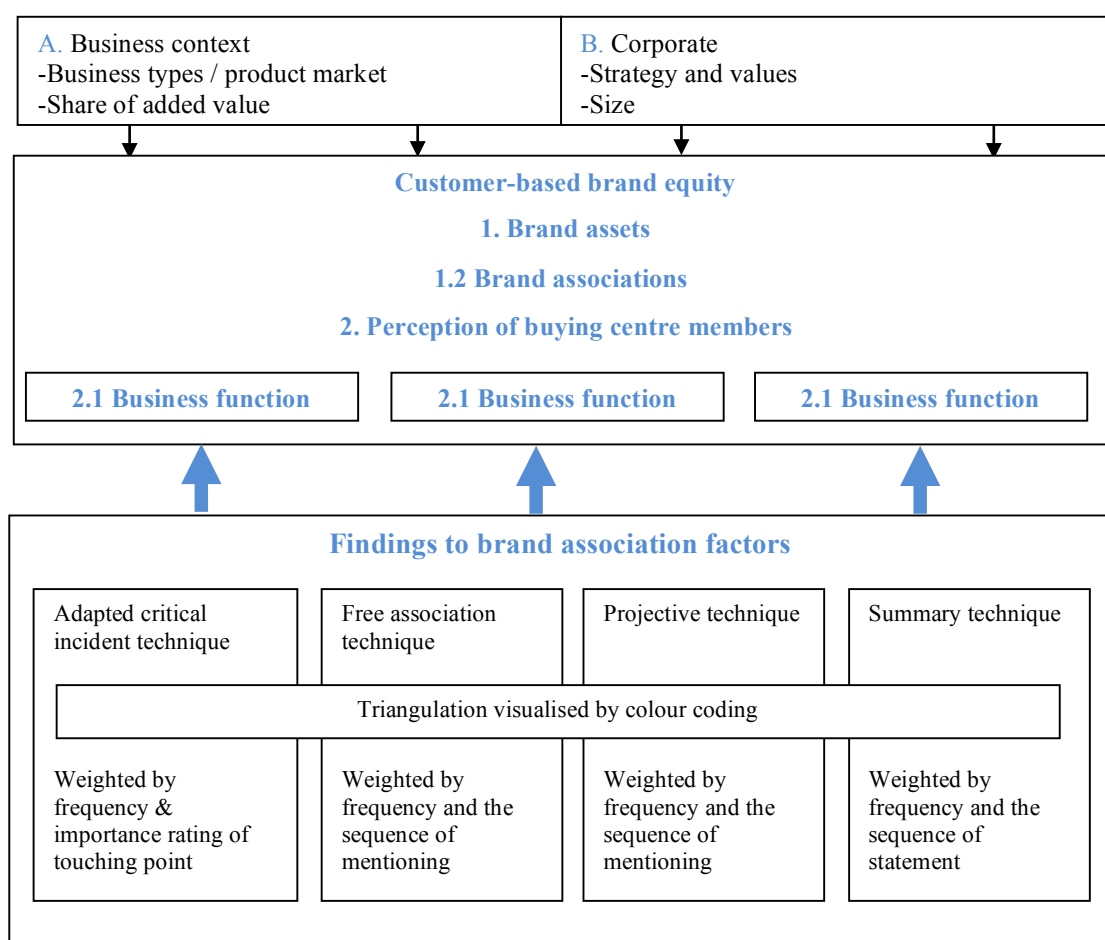
4 FINDINGS

Derived from the defined research questions and objectives, the analyses of the multiple case study focus on the identification of brand association factors. The touchpoints are studied to derive patterns of phases and identify the associated brand association factors, sources and channels. The case-specific analyses of these aspects generally start by studying the characteristics of the business functions, proceed with a cross analysis of these subunits and end with a case-specific conclusion. Following that, the data from the four cases are studied from a holistic view. These analyses and the resulting insights build the foundation to identify coincidences, business function particularities and contextual influences.

The analyses end with a business function-specific analysis considering the identified particularities of the brand association factors, the touchpoints and the perceptions during the identified phases.

4.1 Findings related to the brand association characteristics

The following analysis of the brand association factors is based on a thematic analysis of the transcribed interview, which was jointly reviewed with the participant (see Section 3.7). The identified frequency and the sequence of the themes helped to identify decisive factors of the subunits (2.1 business function) and the cases, which assisted in uncovering some overall patterns (see Figure 9).



Author's own construction

Figure 9: Visualisation of the analysis of brand association factors

To disclose the discrepancies and the similarities of the four exploration methods, the results are presented for each business function (in the sense of triangulation). The business function's perspectives from each case are analysed and compared to a case-specific cross analysis (2. Perception of buying centre members). Each case analysis concludes with a summary of the most important brand association factors (1.2 brand associations). The analysis proceeds with an overall cross analysis and closes with a conclusion about the patterns of brand association factors (1. brand assets) and the particularities of the cases (see A + B and Section 3.4.6).

4.1.1 Case 1 - brand association factors

The buying centre of Case 1 is determined by the definition of the main product and consists of five people (see Table 27).

Table 27: Buying centre members in case 1

Function	Job description	Education	Age	Years with company
Engineering	Head of hardware and software	BSc in electrotechnology, postgraduate in business administration	40	9
Purchasing	Head of purchasing	Merchant in wholesale and retail, merchant in purchasing and material management	47	2
Purchasing	Technical purchasing	Apprenticeship in industry mechanics, professional training in purchasing	38	3
Management	COO	MSc in management and production sciences	32	1
Quality Management	Head of quality management	Apprenticeship in machine mechanics, trade diploma, human resources education, quality management education	35	1

One person is the COO (chief operating officer) from top management, one represents the engineering perspective and is the head of the hardware and software team, one is the head of quality management and two people are from the purchasing department (the technical purchasing and the head of purchasing). The head of engineering has worked for the company for the longest time. All except the head of purchasing have a technical background. These five perspectives form the basis for the influencing brand association factors of Case 1. However, as two employees are from the purchasing department, only the perspectives of four business functions are represented. Therefore, four business function perspectives comprise the customer perspective in Case 1.



4.1.1.1 Engineering perspective

This and the following perspectives are presented by disclosing the results of the four exploration techniques. See Table 28 for the engineering perspective of case 1. The head of software and hardware engineering (E) perspective identified 27 brand association factors through the adapted critical incident technique, which was verified with the participant. The frequency and the rating of the touchpoint in which the brand association factors have been identified serve to define a weighting of the identified factors. Within the other three techniques, the weighting is defined by the frequency and the sequence in

which the participant mentioned them. The extracted factors of the free association technique, projective technique and summary technique largely correspond to the identified factors within the critical incident technique. These overlapping factors are highlighted by colour coding. Interestingly, factors with low frequency in the critical incident technique are strengthened in their relevance through identification and higher weighting in the other techniques.

Table 28: Engineering perspective case 1 - brand association factors

Case 1 Engineering brand association factors – methods triangulation						
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence
17	8	25	Competence	Expensive	2	1
15	7	22	Capability	Willingness to negotiate	1	2
7	5	12	Solutions	Good quality	1	3
5	3	8	Experience	Monopolist	1	4
5	2	7	Reliability	Price/performance	1	1
4	2	6	Understanding of requirements	Technology good	1	2
4	2	6	Willingness to take over responsibility	Pleasant relationship	1	3
3	2	5	Willingness to improve			
3	1	4	Commitment			
3	1	4	Consistency			
3	1	4	Degree of automation	Projective technique		
3	1	4	Focus on best solutions	Pay for quality	1	1
3	1	4	Modernity	Not expensive	1	1
3	1	4	Openness	Pleasure but expensive	1	1
3	1	4	Price/quality	Good quality	1	2
3	1	4	Product quality			
3	1	4	Reaction time			
3	1	4	Serial quality	Summary technique		
3	1	4	Systematic	Co-operation	1	1
3	1	4	Technological competence	Price/quality	1	2
3	1	4	Acknowledges own limitations	Reaction time	1	3
1	1	2	Co-operation	People performance	1	4
1	1	2	Fit of company size			
1	1	2	Partnership			
1	1	2	Responsiveness			
1	1	2	Strategic fit			

	Competence		Quality		Relationship
	Capability		Reaction time		Co-operation
	Price				

An explanation for this phenomenon appears to lie in the procedures of the different techniques. For example, throughout the exploration of the supplier-customer relationship—the execution of the adapted critical incident technique—the price issue is limited to a phase and represents only one facet of the perception. On the other hand, the

findings of the other techniques show a more condensed perspective and indicate that the price issue is a central factor from the engineering perspective.

Based on the frequency and the identification in either one of the other techniques, the two most relevant factors seem to be competence (◆) and capability (◆). Included in the capability factor are themes such as the ability to realise a solution, the engineering ability, the production ability (for example, the compilation of performances) and preciseness. *“The more professional they were equipped, the better the quality was.”* (Engineering “E” Case 1, Interview, 2 February, 2012) A further explicitly valued capability is the ability to understand the requirements. *“The sales people usually talk a lot and do not understand much about technology.”* (Engineering “E” Case 1, Interview, 2 February, 2012) The competence factor mainly represents knowledge about specific subjects (for example, technology or engineering procedures). *“I like it when the engineer introduces complete new approaches.”* (Engineering “E” Case 1, Interview, 2 February, 2012) Competence concerning the production process, knowing the limitations, the competence for improvement and generally developing oneself are valued knowledge aspects. The categorisation of competence is induced by a theme’s focus on the actual perceived knowledge. The existence of competence does not necessarily include the ability of execution (Vincent, 2008). See also Chapter V and Section 4.1.6. The engineering perspective values experience and looks for solutions. The engineer’s perception about reliability focuses on the production process. *“We wanted to receive a process documentation to ensure that the best technology steps are used.”* (Engineering “E” Case 1, interview, 2 February, 2012) Successive factors represent the attitude; for example, the willingness to take over responsibility, improvement and commitment. In relation to a specific brand, engineering describes the brand on the one side as *“a source of pleasure, but expensive”* (Engineering “E” Case 1, interview, 2 February 2012). Throughout the business relationship the price topic does not seem to be a dominant issue for the engineer. Nonetheless, the price issue (◆) emerges frequently during the complementary techniques, which reinforces its relevance. The same applies to the product quality (◆). The “co-operation” (◆) as the first element of the summary statement and the “pleasant relationship” as a relationship aspect (◆), identified through the projective technique, also increase their relevance. The factor of “pleasant relationship” and “partnership” represent the perception of valuing the working relationship towards a common objective. *“A business relationship where the supplier is willing to invest and certain dependence is created, is desirable.”* (Engineering “E” Case 1, interview, 2

February, 2012) Engineering also describes a pleasant interaction with the technical contact person “*pleasant contact person*” (Engineering “E” Case 1, interview, 2 February, 2012). Co-operation, in this case, stands for the perception of valuing constructive behaviour towards a specific problem and the supplier being willing to negotiate. The “reaction time” (♦) factor is only mentioned once; nevertheless, its relevance is supported by being one of the summary brand association factors. The factor “time” represents an important feature, as the engineer sees himself valued by the adherence to deadlines. “*The reaction time of the supplier influences the own development time.*” (Engineering “E” Case 1, interview, 2 February, 2012)

Based on the analysis and the triangulation of the results, engineering looks for a capable engineering and production partner, which offers the needed precision and compilation of performances and understands the requirements. The competences to give advice in specific subjects, to be competent in procedure and to be experienced are valued brand association factors. The quality of the offered solutions is perceived and needs to have a suitable price. The perceived willingness to improve and take over responsibility are attitudes that are valued accordingly to the perception of co-operation and partnership.

4.1.1.2 Purchasing perspective

The exploration of the purchasing perspective identified 47 brand association factors with the critical incident technique, which were verified with the participants. See Table 29. Corresponding to the engineering function, most of the extracted factors of the other exploration methods correspond to the identified brand association factors during the business relationship. Furthermore, some factors are also affirmed or elevated in relevance. To compose the mode of sequence of the two purchasing participants, the mean of both sequence values determines the sequence. Although two purchasing function perspectives are matched, the highest frequency is equal to the engineering’s highest factor frequency. By looking at the two purchasing perspectives in detail, the variety recites through a higher variety of factors, which are mentioned 1 to 3 times. All factors with a higher frequency are valued by both. The value of reliability seems to be higher for the operative purchasing function (P). The other high relevance factors are more harmoniously distributed. The operative purchasing, corresponding to the nature of the function, focuses more on aspects that are related to ensure success for the operative process and the head of purchasing (HP) seems to emphasise social factors and competence. On the other hand the imbalance concerning the reliability factor (♦) is

balanced by the results of the other two methods where both perspectives largely correspond.

Table 29: Purchasing perspective case 1 - brand association factors

Case 1 Purchasing brand association factors – methods triangulation							
Importance	Frequency	Total	Adapted critical incident technique	Free association technique	Frequency	Sequence	
16	7	23	Reliability	Reliability	6	1,5	
14	6	20	Competence	Price/performance	4	3,3	
9	6	15	Openness	Flexibility	3	3,3	
9	5	14	Accurateness	Fits with us	2	3,5	
8	4	12	Price / range	Social competence	2	4,5	
8	4	12	Speed	Modernity (facilities)	2	1,5	
7	4	11	Product quality/functionality	Capability (machinery)	1	2,0	
7	3	10	Understanding of requirements	Competent contact person	1	5,0	
6	3	9	Commitment	Continuity	1	3,0	
6	3	9	Organisational talent	Expensive	1	3,0	
6	3	9	Partnership	Expertise	1	2,0	
6	2	8	Orderliness	Monopolist	1	4,0	
6	2	8	Systematic	Pleasant climate	1	6,0	
5	2	7	Delivery performance	Quality	1	2,0	
5	2	7	Honesty				
5	2	7	Strategic fit				
4	2	6	Experience	Projective technique			
4	2	6	Flexibility	Reliability	4	2,25	
4	2	6	Modernity	Expensive	2	1	
3	2	5	Fit of performances	Expensive but good	2	1	
3	2	5	Proximity	Competence	1	3	
3	1	4	Comprehensible pricing	Fairness	1	2	
3	1	4	Continuity	Good quality	1	2	
3	1	4	Co-operation	Quality only for standard	1	2	
3	1	4	Engagement	Technology	1	1	
3	1	4	Innovation				
3	1	4	Organisation performance				
2	1	3	Ability to execute	Summary technique			
2	1	3	Best price	Quality	2	4	
2	1	3	Detail information	Reliability	2	2	
2	1	3	Endeavour	Competence	1	1	
2	1	3	Learning behaviour	Flexibility	1	2	
2	1	3	Long-term solutions	Partnership	1	5	
2	1	3	Quality management	Price range	1	4	
2	1	3	Reaction time	Price/performance	1	4	
2	1	3	Solution orientation	Solution orientation	1	2	
1	1	2	Approved				
1	1	2	Business-like				
1	1	2	Economy of scale				
1	1	2	Improvement				
1	1	2	Logic of argumentation				
1	1	2	Objectiveness				
1	1	2	Provident behaviour				
1	1	2	Fit of company size				
1	1	2	Social competence				
1	1	2	To feel welcome				

 Reliability	 Quality	 Flexibility	 Co-operation
 Competence	 Relationship	 Modernity	 Solution orientation
 Price	 Strategic fit	 Continuity	 Social competence

On behalf of the comments of the participants, the reliability brand association factor (◆), which is identified with all four methods, focuses mainly on the perception of the production and the delivery process. The reliability regarding the delivery time and the completeness are the leading factors concerning reliability. The competence factor (◆), which is also identified with all four methods, includes the know-how of management and specific subjects you would expect the supplier of a particular product or service to have; for example, the competence in procedure or to know what technical values need to be taken into account. The openness is valued during many touchpoints. *“Does the supplier communicate about potential issues concerning delivery problems or does the supplier simply deliver too late?”* (Purchasing “P” Case 1, interview, 7 January, 2012) Furthermore, the accurateness in the way topics are presented is highly valued. A further highly relevant factor is the price/performance ratio, followed by the value of speed. The relevance of the price/performance ratio (◆) is nourished by the other exploration methods. The relevance of product quality (◆) is further increased by the results of the other three exploration methods. Additionally, the value of continuity (◆) is identified by two methods, the general value of co-operation (◆) is reinforced by the results of the free association technique, the value of flexibility (◆) is identified by three methods and the perceived solution orientation (◆) is identified with two methods. The value of relationship (◆) is increased by the results of the summary statement and the projective technique. Interesting is the reinforcement of the value of social competence (◆), with the identified factors “to feel welcome” and to perceive a “pleasant climate”, identified with the free association technique. In relation to a specific brand, the purchasing function describes the values of the corporation as *“being humanly open and having a good image with respect to how people are treated”* (Purchasing “HP” Case 1, interview, 25 July, 2012).

In comparison to the engineering function (which focuses on capability, solutions and experience), the purchasing focuses more on reliability, openness, accurateness and price. Purchasing therefore seems to focus on the attitude and personality of the brand. Nonetheless, reliability is strongly interrelated with the capability of the brand and is interrelated with the perception of the organisation performance.

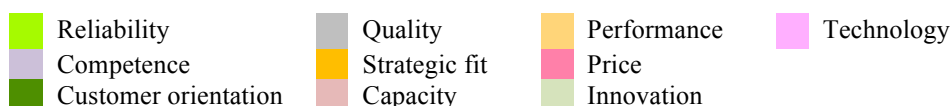
4.1.1.3 Management perspective

For the management function (M), only 18 brand association factors were identified throughout the business relationship by the critical incident technique (see Table 30).

They were verified with the participant. The small number of brand association factors is mainly due to the small number of touchpoints. On the other hand, the number of identified brand association factors is somewhat increased through the results of the other three exploration methods. Owing to the participant repeatedly mentioning some themes, the mean of the sequence has been utilised to define the sequence.

Table 30: Management perspective case 1 - brand association factors

Case 1 Management brand association factors – methods triangulation						
Importance	Frequency	Total	Adapted critical incident technique	Free association technique	Frequency	Sequence
3	2	5	Authenticity	Competence	2	3,5
3	1	4	Adherence	Bad experience with procedure	1	1
3	1	4	Attitude towards work	Cost structure	1	5
3	1	4	Competence	Efficiency	1	2
3	1	4	Customer orientation	Innovation	1	2
3	1	4	Honesty	Management	1	2
3	1	4	Production performance	Organisation	1	3
2	2	4	Strategic fit	Ownership	1	1
3	1	4	Supply chain capacity	Quality	1	3
3	1	4	Understanding of requirements	Reliability	1	4
2	1	3	Co-operation	Technology	1	1
2	1	3	General performance			
2	1	3	Long-term solutions	Projective technique		
2	1	3	Price structure	Expensive	2	1,5
2	1	3	Reliability	Functionality	2	4
2	1	3	Transparency	Innovative	1	2
1	1	2	Daily performance	Price/performance	1	2
1	1	2	Will to improve	Reliability	2	1
				Technology	1	3
				Summary technique		
				Price	3	2,7
				Capacity	2	3,5
				Competence	2	2,5
				Reliability	1	3
				Organisational talent	1	1
				Orderliness	1	2
				Communication skills	1	3
				Quality	1	4
				Fit of company size	1	3
				Efficiency	1	4



The identified frequency of the factors is rather balanced. The perceived authenticity seems to be a relevant aspect during the first contact and is valued during future execution of improvement efforts at a later phase of the business relationship. The value of

authenticity stands for a low gap between what the brand communicates and what the actual capability is. *“On behalf of the homepage you can see what the brand is trying to sell.”* (Management “M” Case 1, interview, 22 July, 2012) The issue is about not losing time through engaging with suppliers that do not offer a suitable performance. The value of adherence is a particular aspect of reliability. Since perception occurs on a daily basis and is perceived during routine inspection and by consulting the employees, the term seems to represent the value in a more accurate way. The brand association factor reliability (◆) is also identified as a separate factor during the critical incident technique and is identified by the other exploration techniques; therefore, the reliability theme appears to have a particular relevance. The perception of competence (◆)—mainly in management and the specific supply subject—is an important factor, as it is also identified with the other two techniques. The attribute of being honest and the attitude towards work and the customer orientation are further factors that disclose the management’s interest in general management values. The factor customer orientation (◆) is reinforced by the identified factor “bad experience with procedure”, which indicates that the supplier did not react with a customer perspective towards a quality issue. Additionally, general performance factors (◆) are valued, identified by the value of general performance, daily performance, management and organisation. Even so, management values production performance (◆), hinting on efficiency and quality. The brand association factors innovation (◆) and value of technology (◆) are additional factors identified through the free association and projective techniques. A more relational aspect is found in one of the descriptions from the projective technique. The management describes the brand as *“...very functional, but not something to fall in love with”* (Management “M” Case 1, interview, 22 July, 2012). Other factors identified by two techniques are the strategic fit (◆) and perceived capacity (◆). The price factor (◆) is repeatedly identified through all exploration techniques. In relation to the price issue, two comments by the management during the projective technique are interesting: *“...you get a lot of car for the money...”* and *“...does not look very good, but it drives”* (Management “M” Case 1, interview, 22 July, 2012).

The management appears to particularly value reliability, general performance, price, product quality, efficiency, competence and attitude. Moreover, the management’s comments appear to indicate that the management values aspects that go beyond straight functionality. Management perceives the brand also indirectly through the purchasing and engineering functions. Corresponding to the purchasing function, the competence factor includes the know-how of management and specific supply subjects.

4.1.1.4 Quality management perspective

For the quality management function (Q), 12 brand association factors were identified with the critical incident technique, which were verified with the participant (see Table 31). The small number of brand association factors is mainly due to the small number of touchpoints. The identified frequency is rather balanced.

Table 31: Quality management perspective case 1 - brand association factors

Case 1 Quality management brand association factors – methods triangulation						
Importance	Frequency	Total	Adapted critical incident technique	Free association technique	Frequency	Sequence
3	2	5	Serial quality	Honesty	1	1
3	1	4	Logic	Solution orientation	1	1
3	1	4	Professionalism	Bad experience with procedure	1	1
3	1	4	Quality management			
3	1	4	Reaction time	Projective technique		
3	1	4	Willingness to solve problem	Quality	3	1,3
2	1	3	Cleanliness	Price	1	1
2	1	3	Competence			
2	1	3	Orderliness	Summary technique		
2	1	3	Quality assurance	Product quality	1	1
1	1	2	Adherence	Reliability	1	2
1	1	2	Product quality			

Quality
 Solution orientation
 Reliability

Based on the recurrence in three of the exploration methods and according to the task of the business function, the most important value appears to be the quality factor (♦), which is divided into serial and product quality. The serial quality stands for constant quality throughout a series production and is defined by the scrape rate. A high scrape rate leads to a remark and a supplier report defining the measures taken. These measures are judged towards their causal logic (Quality management “Q” Case 1, interview, 5 July, 2012). Other identified factors include perception of the logic and general professionalism, quality management and reaction time. The brand association factor of being solution oriented (♦) is seen to be reinforced by the willingness to solve a problem.

As the management function, the head of quality management regularly examines delivery performance through the ERP system (♦) (Quality management “Q”, interview, July 5, 2012). Correspondingly, this topic is an aspect of the perceived reliability.

The perception of the quality management function seems to be mainly influenced by the quality and approach towards finding a solution in the event of a problem and the

perceived reliability. Some more relational aspects are indicated by some comments during the projective technique towards certain brands: “...is like a red rag to a bull...annoys me” (Quality management “Q”, interview, 5 July 2012). The quality management function seems to have a narrow focus of brand association factors, which is believed to be formed through the responsibility of the business function and the few touchpoints.

The analysis of the business function-specific analysis shows that perspectives vary in focus and variety of valued brand association factors and that the triangulation of the techniques enable the relevance of factors to be balanced. The following analysis (Section 4.1.1.5) aims to study in more detail the corresponding business functions and specific factors and investigates the composition of factors from a case perspective.

4.1.1.5 Cross analysis

The cross analysis contains three parts. The first compares the awareness and the relative ranking (see Table 32), the second analysis the overlapping of factors (see Table 33) and the third looks at the business function-specific factors (see Table 34).

For this analysis the participants were asked to list four to five supplier brands that came to mind. The participants were then asked to rate the brands according to relative performance (see also Section 3.6). The analysis aims to study the differences in brand awareness (see framework 1.1 brand awareness) of the business functions (see framework “2.1 business functions”).

Table 32: Brand awareness and ranking case 1

Sequence	Ranking	Engineering	Ranking	Purchasing	Ranking	Head purchasing	Ranking	Management	Ranking	Quality management
1	3	Brand 9	1	Brand 14	3	Brand 7	5	Brand 10	1	Brand 2
2	1	Brand 7	3	Brand 2	6	Brand 3	1	Brand 14	2	Brand 10
3	4	Brand 8	2	Brand 12	5	Brand 13	3	Brand 12	2	Brand 7
4	2	Brand 14	4	Brand 5	2	Brand 4	2	Brand 6	2	Brand 11
5	4	Brand 4			1	Brand 14	4	Brand 5	2	Brand 1
6					4	Brand 15			1	Brand 14

One brand (number 14) seems to be anchored in the minds of all business members and is also seen to be a top supplier. Apart from brand 14, there is no analogy between the two purchasing functions. One explanation is that the list of brands is strongly influenced by the state of interaction at the time of the interview. On the one hand the involvement of the two purchasing functions is dispersed through certain task sharing, and on the other hand the head of purchasing had left the company four months prior to the interview being completed.

A further interesting aspect is that the top-of-mind supplier brand does not always mean that the supplier brand is seen to be a top performing brand and vice versa. The quality management function saw himself as not able to define a gradual ranking due to his few contacts; however, he was able to differentiate between a good and less good supplier. A further interesting aspect is that among the business functions the relative ranking largely corresponds. Only one brand (brand 4) is ranked controversial between the head of purchasing and the engineering. This divergence is believed to originate from differing experiences and values, as two of the brands in mind (brand 14 and brand 7) happened to be utilised as reference for the free association and projective technique parts of the interview.

Concerning **brand 14**, all business functions have a positive perception. The head of purchasing specifically mentioned relationship aspects such as openness and the way people are generally treated, which in his view defines their image (Purchasing “HP” Case 1, interview, 25 July, 2012). Purchasing mentioned their operative performance—owing to their reliability concerning deadlines and prices—and mentioned their flexibility (Purchasing “P” Case 1, interview, 7 January, 2012). Although engineering had no personal experience, he associated good quality with supplier brand (Engineering “E” Case 1, interview, 2 February, 2012). The head of quality management mentioned aspects about the supplier being solution-oriented (Quality management “Q” Case 1, interview, 5 July, 2012). Management mainly mentioned general business aspects such as efficiency and the perception of the organisation (Management “M” Case 1, interview, 22 July, 2012). It is noticeable that mainly middle-class care brands are associated with the supplier brand.

All participants agree that **brand 7** is expensive and four of the five perceive the good capabilities of the supplier brand. The management and operative purchasing formed their

perception through hear-say and describe the brand as unreliable and associate the supplier with bad quality. Purchasing description: “poor delivery reliability, technical vulnerability, good capabilities, bad experience” (Purchasing “P” Case 1, interview, 7 January, 2012). Management description: “unreliable, rather expensive, contaminated site” (Management “M” Case 1, interview, 22 July, 2012). On the other hand, the engineering and operative purchasing see an improvement of their performance. The engineering even associates the supplier with the car brand BMW. The other business functions associate the supplier with a medium class car brand, which they associate with low performance and being unreliable. The quality management describes the brand as “...*bad quality*...” (Quality management “Q” Case 1, interview, 5 July, 2012) The engineer also mentioned the good relationship and even mentioned “it is a pleasure to work with the supplier” (Engineering “E” Case 1, interview, 2 February, 2012). Engineering has an individual view, except concerning price in which engineering agrees with the majority. Management and purchasing function perceive the supplier brand as unreliable, although they are aware of their good capabilities (organisation, infrastructure, machine park). Their perception partly follows a bad experience and therefore does not represent the actual state of the brand’s performance. The relative rating by the engineering (number 1) and head of purchasing (number 3) appears to fit with the statements.

The brands in mind seem to have a large overlap and the perception seems to be generally harmonious. The engineering perception seems to differ in some aspects. On the one hand the engineering values the existing relationship and on the other hand has a controversial perception of a brand’s performance in relation to the perspective of the head of purchasing, which seems to be influenced by differing experiences.

Table 33 gives an overview of the main valued factors defined by the determined frequency. The table discloses which of the business functions contributed to the identified frequency.

Table 33: Cross analysis case 1 - matching brand association factors

Frequency	Brand association factors	Business functions			
Adapted critical incident technique					
17	Competence	E	P	M	Q
13	Reliability	E	P	M	Q
11	Capability	E	P	M	-
10	Solutions	E	P	M	Q
10	Product quality/functionality	E	P	-	Q
9	Price	E	P	M	-
9	Openness	E	P	M	-
7	Speed	E	P	-	Q
7	Commitment	E	P	-	-
7	Strategic fit	E	P	M	-
6	Understanding of requirements	E	P	M	-
Free association technique					
9	Price	E	P	M	-
7	Reliability	-	P	M	-
3	Competence	-	P	M	-
3	Flexibility	-	P	-	-
3	Quality	E	P	M	-
Projective technique					
11	Price	E	P	M	Q
6	Quality	E	P	-	Q
6	Reliability	-	P	M	-
Summary technique					
6	Price	E	P	M	-
4	Quality	-	P	M	Q
4	Reliability	-	P	M	Q
3	Competence	-	P	M	-
2	Capacity	-	-	M	-

E: Engineering / P: Purchasing / M: Management / Q: Quality Management

Competence and reliability, valued by all four business functions, are the brand association factors with the highest frequency during the business relationship. As previously described during the business function-specific analysis, the business functions focus on particular aspects of competence and reliability. The same applies for the brand association factor capability. All four business functions value solutions, either to find a solution for a particular component or a solution if a problem appears during the relationship. However, the issue of price is not as frequently perceived during the business relationship; however, it is a very important aspect due to the results of the other exploration techniques. The brand association factor product represents the product quality and functionality, and is also enhanced by the results of the other three exploration techniques.

Apparent is that the engineering and purchasing function seem to have a higher emphasis on the perception of commitment, speed and product functionality and quality. A highly divergent perception is the quality management perception, which focuses on quality and reliability. Table 34 reveals the identified specific brand association factors.

Table 34: Cross analysis case 1 - business function-specific brand association factors

Brand association factors	Frequency	Importance
Engineering		
Acknowledges own limitations	2	6
Purchasing		
Accurateness	5	9
Organisational talent	4	6
Flexibility	2	4
Proximity	2	3
Business-like	2	2
Social competence	2	2
Innovation	1	3
Management		
Authenticity	2	3
Supply chain capacity	1	3
Quality management		
-	-	-

Apart from the specific competence and capability aspects, the engineering values when the engineer of the supplier brand acknowledges the own limitations and is open to it. The engineering business function mentions that by these means, experts of the missing competence can be consulted to achieve the best solution possible (Engineering “E” Case 1, interview, 2 February, 2012). The purchasing function has the most specific factors. Accurateness, organisational talent and flexibility are all required factors for a successful business relationship. Business-like behaviour in difficult situations and innovation are factors to help ensure an enduring business relationship. Geographical proximity is valued to save time and money if face-to-face interaction is required (Purchasing “P” Case 1, interview, 7 January, 2012); social competence is also a valued factor. Management values authenticity as overestimation leads to product and business failure. Management perceives the overall supply chain capacity to ensure the required volumes. Quality management seems to have no specific brand association factors. These identified specific factors help towards understanding the business function-specific perspective, which is embossed by the required characteristics of a supplier brand to successfully accomplish the business function-specific task.

4.1.1.6 Conclusion to brand association factors in case 1

As described in Section 3.4.2, the company in Case 1 mainly assembles the sensors and completes the final test. Although the company in Case 1 develops the sensors, the company is dependent on the value of the component suppliers. This dependency of the component supply business is also described by Backhaus & Voeth (2014) and is reflected in the identified valued brand association factors. The findings disclose that the buying

centre has overlapping values and the business functions appear to value specific factors, which relate to their business function-specific area of responsibility (see Table 35).

Table 35: Brand association factors for case 1

Brand association factors			
-Competence	-Price	-Reliability	
-Capability	-Product quality/functionality	-Openness	
-Solutions		-Speed	
-Strategic fit		-Commitment	
-Understanding of requirements		-Flexibility	
Engineering	Purchasing	Management	Quality management
-Knowledge of limitations	-Accurateness	-Authenticity	-Quality
-Production performances	-Organisational talent	-Supply chain capacity	-Reliability
	-Flexibility		
	-Proximity		

The buying centre values competence, capability, understanding of requirements and reliability and requires solutions in diverse aspects. Apart from the value of product quality and functionality, the price is also a leading factor. Further valued factors are the openness, speed, commitment, flexibility and the strategic fit. It is assumed that the strong emphasis on competence is related to the required engineering competence for components, which are complex and highly integrated. In addition, the company declares that innovation and know-how have been the basis for its success over the last 50 years (see Section 3.4.2).

The management engages himself in the mind-set of the supplier and values authenticity. The specific purchasing values characterise a careful, flexible and well organised supplier brand, which preferably is nearby. The specific engineering values disclose the technological dependence. Important to acknowledge is that engineering mentioned *“his degree of involvement is interrelated to the complexity of the purchased component”* (Engineering “E” Case 1, interview, 2 February, 2012). For the quality management, no specific value is identified; nevertheless, quality and reliability are the main factors that this business function values. Interestingly, the quality management stated that *“the price is not of interest”* (Quality management “Q” Case 1, interview, 5 July, 2012) and that *“if a supplier delivers quality products he practically has no perception of the supplier”* (Quality management “Q” Case 1, interview, 5 July, 2012). Of note is that both the engineering and purchasing functions value relational aspects—such as a pleasurable relationship with a competent engineer (Engineering “E” Case 1, interview, 2 February, 2012). In addition, the purchasing function values the humanity of a company (Purchasing

“HP” Case 1, interview, 25 July, 2012). This relational aspect did not appear frequently; however, its recurrence in different techniques has been highlighted by the triangulation.

4.1.2 Case 2 - brand association factors

The buying centre of Case 2 is defined through the members who were involved in one of the recent projects (see Table 36).

Table 36: Buying centre members in case 2

Function	Job description	Education	Age	Years with company
Engineering	Project leader—hardware	Apprenticeship in electrical installation, Professional College in electrotechnology	30	5
Engineering	Project leader—software	Apprenticeship in electrical installation, Professional College in lectrotechnology	55	23
Management	CEO	Apprenticeship in electro mechanics, BSc in electrotechnology, postgraduate in business administration	46	10












The two members of the engineering department also had the roles of project leaders; one focused on hardware and the other specialised in software. The third and last member was the CEO of the company. Therefore, Case 2 had two business functions: the general management and engineering functions. All three members have a technical background. The age and length of company membership of the project leader of software speak for extensive experience.

4.1.2.1 Engineering perspective

Throughout the business relationship, 25 brand association factors were identified and were verified with the participants (EPH: engineering project leader -hardware, EPS: engineering project leader -software). See Table 37. The number is comparable with the number of the engineering perspective in case 1. In Case 2 the free association technique educed some new brand association factors, which did not directly appear with the adapted critical incident technique. To define the sequence of corresponding themes, the mean value of the two individual values is deployed.

Table 37: Engineering perspective case 2 - brand association factors

Case 2 Engineering brand association factors – methods triangulation							
Importance	Frequency	Sum			Frequency	Sequence	
			Adapted critical incident technique	Free association technique			
10	6	16	Competence	Solution	6	2,7	
9	4	13	Clarity	Product quality	3	3,7	
8	5	13	Detail information	Competence	2	4,5	
9	4	13	Reaction time	Continuity	2	2	
8	4	12	Understanding of requirements	Social competence	2	2,5	
6	3	9	Availability	Availability	1	5	
6	3	9	Simplicity	Innovation	1	1	
5	4	9	Product quality/functionality	Market share	1	2	
4	4	8	Solution	Relationship	1	3	
5	2	7	Interest	Reliability	1	3	
5	2	7	Understanding of application	Segment capability	1	2	
3	3	6	Openness	Size	1	1	
4	2	6	Structure	Support	1	3	
3	2	5	Engagement	Technology	1	4	
3	2	5	Practicality	Transparency	1	3	
3	2	5	Transparency				
3	1	4	Responsiveness	Projective technique			
2	1	3	Honesty	Product quality	3	1,3	
2	1	3	Robustness	Price	2	1,5	
1	1	2	Awareness	Solution	2	1	
1	1	2	Customer orientation	Capacity	1	3,0	
1	1	2	Efficiency	Conservative	1	1	
1	1	2	Flexibility	Continuity	1	2	
1	1	2	Reliability	Design	1	2,0	
1	1	2	Visibility	Efficiency	1	2	
				Innovation	1	3	
				Summary technique			
				Product quality	1	1	
				Reliability	1	1	
				Availability	1	2	
				Price (market)	1	2	
				Support	1	3	
				Competence	1	3	

 Competence	 Solution	 Reliability	 Support
 Availability	 Transparency	 Continuity	 Price
 Quality	 Efficiency	 Innovation	

Similar to Case 1, competence (♦) appears to be a relevant brand association factor as it is also identified through the free association technique and the summary technique; however, it has a particular characteristic in Case 2. The focus lies mainly on the perception of product knowledge and not on general technology knowledge. Further new factors are the valuation of clarity, detail of information and availability. Availability (♦) appears in three of the four techniques. “A catalogue needs to be clearly arranged...the more complicated, the more complicated the company.” (Engineering “EPH” Case 2, interview, 13 August, 2012) “I am concerned about the availability of a person who can

answer my questions. As planning schedules become increasingly shorter I am placing orders in which I directly need and rely on the stated lead-times.” (Engineering “EPH” Case 2, interview, 13 August, 2012) As in Case 1, the attitude towards responsibility and improvement are of primary importance, and engineering values the perception of interest and engagement. As in Case 1, the product quality/functionality (◆) factor is, from the business relationship perspective, one of many valued factors. On the other hand the product quality is one of the main brand association factors identified with the other three techniques. This applies also with the factor of reliability (◆). Interesting is that the price factor (◆) is only identified during the projective technique and appears as one of the last factors during the summary technique. This circumstance seems explainable by the fact that the realised projects are often unique and the focus lies on the best solution, which was also mentioned by one of the engineering members during the interview. The value of solution (◆) is also reinforced by identification with three techniques. Additionally, the value of transparency (◆) and efficiency (◆) is reinforced by being identified with a second technique. Transparency stands for the disclosure of the causal link of a product failure. *“It is important to know why the failure appeared so that a possible shortcoming in the design of the system can be found”* (Engineering “EPH” Case 2, interview, 13 August, 2012). Three aspects, not directly identified during the exploration of the business relationship, are the factors of continuity (◆), support (◆) and innovation (◆); all identified with two techniques. The continuity of the life cycle of the products and the continuity of the salesperson are valued. In addition, the factor of simplicity is mentioned during important touchpoints. The simplicity refers mainly to the installation and commissioning of the products. Of note is that during the free association and projective techniques, the engineering function also mentions some relational aspects on behalf of the presented brands: *“...to get proper advice you need to know who to ask...”* (Engineering “EPS” Case 2, interview, 11 August, 2012). Both engineering functions mention the value of a very knowledgeable salesperson (Engineering “EPS” Case 2, interview, 11 August, 2012; Engineering “EPH” Case 2, interview, 13 August, 2012). The hardware engineer project leader mentions an unappealing and arrogant salesperson and the unpleasant frequent changes of a salesperson during the description of one of the supplier brands (Engineering “EPH” Case 2, interview, 13 August, 2012).

In summary, the engineering in Case 2 values a brand with sophisticated product competence, which is able to work out solutions, provide detail information, is clear in the appearance and the performance and ensures availability of simple, robust, quality

products. Furthermore, a valued supplier brand offers continuity, is interested, is transparent in communication, is reliable and offers support if needed.

4.1.2.2 Management perspective

The management function (M) in Case 2, although he is the CEO, is strongly involved in the operative business, which can be attributed to the circumstance that Case 2 is a small company. Due to the strong involvement, the number of brand association factors during the critical incident technique is higher compared to the management function in case 1. See Table 38. The free association and the projective techniques brought up additional factors relating to the personality, strategic aspects and characteristics of the product.

Table 38: Management perspective case 2 - brand association factors

Case 2 Management brand association factors – methods triangulation							
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence	
9	7	16	Competence	Product quality	2	4	
6	3	9	Solution	Availability	1	4	
4	3	7	Openness	Careful	1	3	
3	3	6	Clarity	Clarity	1	4	
3	2	5	Transparency	Conservative	1	4	
2	2	4	Customer orientation	Continuity	1	1	
3	1	4	Efficiency	Customer orientation	1	3	
3	1	4	Practicality	Flexibility	1	6	
3	1	4	Understanding of application	Innovation	1	2	
2	2	4	Understanding of requirements	Market share	1	1	
2	2	4	Reaction time	Simplicity	1	3	
2	1	3	Honesty	Solution (total)	1	2	
2	1	3	Logic	Speed	1	5	
2	1	3	Objectiveness	Strategic fit	1	2	
2	1	3	Reliability				
2	1	3	Responsiveness	Projective technique			
1	1	2	Availability	Price	2	1	
1	1	2	Best price	Functional	2	3	
1	1	2	Consistency	Technology	2	3	
1	1	2	Continuity	Differentiation	1	1	
1	1	2	Detail information	Premium	1	2	
1	1	2	Management				
1	1	2	Product quality/functionality	Summary technique			
1	1	2	Quality System	Predictability	1	1	
1	1	2	Systematic	Continuity	1	2	
				Quality	1	3	
				Availability	1	4	
				Long-term lifecycle	1	5	
				Innovation	1	6	

■ Solution	■ Reaction time	■ Price	■ Innovation
■ Clarity	■ Reliability	■ Continuity	
■ Customer orientation	■ Availability	■ Quality	

The main brand association factor during the business relationship is competence. However, the competence aspect is not identified with the other three exploration techniques. The valued aspect of offering solutions (♦) and being solution oriented is on the other hand identified with the free association technique. The perception of clarity (◆) and customer orientation (◆) in communication are brand association factors confirmed by the free association technique. The aspect of customer orientation stands for the consideration of the customer's perspective and their process. *"This homepage is structured in the way an engineer thinks."* (Management "M" Case 2, interview, 10 August, 2012) The reaction time (◆), availability (◆), continuity (◆) and reliability (◆) are also valued brand association factors supported by the results of the other exploration techniques. Particularly, the brand association towards continuity seems to be highly valued, although only mentioned once with the critical incident technique. The management values the continuity of the contact person, the continuity of the product portfolio and the value of slow changes (Management "M" Case 2, interview, 10 August, 2012). Corresponding to the other business function perspectives, the product quality (◆) is one of many factors during the business relationship; however, it is a main factor identified with the other exploration techniques. Another factor identified through two techniques is the value of innovation (◆). The price (◆) is also identified through two techniques, although seems to be somewhat underrepresented for a management view. Corresponding to the management's area of responsibility, the CEO, although not directly confronted with the simplicity of the product, does value it.

The analysis of the management perspective evinces the value of product competence and the perception of attractive solutions. Clarity, transparency and customer orientations are valued. The continuity, availability and the product quality are valued brand associations, while the price and perception of innovation are relevant factors of an interesting supplier brand. In relation to the typical management area of responsibility and in contrast to the engineering, the management seems to be more interested in the price factor.

4.1.2.3 Cross analysis

In Case 2 the cross analysis also starts by comparing the awareness and the relative ranking of the brands in mind (see Table 39), which aims to identify differences of business function perspectives (see Section 2.4 and point 1.1 brand awareness and business functions 2.1). The second cross analysis looks at the overlapping factors and the cross analysis ends with an analysis of the business function-specific factors.

Table 39: Brand awareness and ranking case 2

Sequence	Ranking	Engineering (H)	Ranking	Engineering (S)	Ranking	Management
1	4	Brand 7	1	Brand 7	2	Brand 7
2	5	Brand 3	2	Brand 1	1	Brand 1
3	3	Brand 6	3	Brand 6	3	Brand 4
4	1	Brand 5	2	Brand 3	4	Brand 8
5	2	Brand 9	1	Brand 5	4	Brand 2

H: Hardware / S: Software

As in Case 1, one brand is anchored in the minds of all buying centre members. This brand is also the brand that is top-of-mind in this case. As might be expected, the two engineering business functions have a very high overlap. Interesting is that the management seems to be involved with alternative brands. This is even more remarkable since this case represents a small company and the participants work very closely—physically and on the same projects. The software engineer (S) preferred to rate two brands on first and second position. The hardware engineer (H) had the same top-of-mind brand (7) but different brand (3) in second position. As in Case 1, two of the brands in mind (brands 5 & 7) happened to be brands utilised for the free association and the projective techniques.

The engineering members agree on the relative performance of **brand 5**. All three seem to agree on the attractiveness of the products and the range of assortment, except that management believes the supplier brand has a wide assortment and sees this as a strength. One of the engineering members sees the supplier as having a narrow assortment, but being good in their segment. With respect to this supplier brand, both engineering members specifically mentioned a relationship aspect, the competence of the sales person, which *“is able to help in a very knowledgeable way”* (Engineering “EPH” Case 2, interview, 13 August, 2012; Engineering “EPS” Case 2, interview, 11 August, 2012). The management mentioned aspects concerning the general business performance. The engineering particularly values product design, product quality and product innovation and solutions. Characterisation of the brand is on the one hand described from a business function-specific perspective and on the other hand the relative rating matches the defined attributes.

As recognised, the relative ranking of the top-of-mind **brand (7)** of one engineering member does not fit with the perspective of the other engineering business function. All three agree on the product quality. Both engineering members mentioned availability

aspects and that the supplier has a wide assortment. It is interesting that management and one engineering member mentioned that the supplier brand is seen as conservative, not state-of-the-art technology and as careful. These aspects, which generally could be seen as negative, are seen by management as positive since they need suppliers for servicing their systems that do not change much during the lifetime of the system (Management “M” Case 2, interview, 10 August, 2012). Both of the engineering members mentioned a relationship aspect. One mentioned that *“the salesperson is not sympathetic”* (Engineering “EPH” Case 2, interview, 13 August, 2012) and the other mentioned that *“you have to know whom to talk with to get the support you want”* (Engineering “EPS” Case 2, interview, 11 August, 2012). Hence, they both perceive support and relationship performance as rather low. Management concentrates on business aspects. This supplier brand has been top-of-mind during the assessment of the awareness. In agreement with the described poor support and relationship performance, one of the engineering members rates the relative performance as very low, although the other rated the relative performance as one of the highest. One explanation is that this engineering member only had the product quality in mind.

The brands in mind have a large overlap between the engineering functions. However, they disagree about the relative performance of the top-of-mind brand. An explanation seems to lie in the emphasis of the relationship factor in comparison to the general product performance. The management is engaged with other brands and, as recognised during the analysis of the management’s perspective, values mainly general factors, noticed especially during the execution of the free association and projective techniques.

Table 40 reveals the factors with the highest frequency as identified with the different techniques, and discloses which of the business functions contributed.

Table 40: Cross analysis case 2 - matching brand association factors

Frequency	Brand association factors	Business functions	
Adapted critical incident technique			
13	Competence	E	M
7	Clarity	E	M
7	Reaction time	E	M
7	Solution	E	M
6	Understanding of requirements	E	M
6	Detail information	E	M
6	Product functionality/quality	E	M
6	Openness	E	M
4	Availability	E	M
4	Transparency	E	M
3	Understanding of application	E	M
3	Practicality	E	M
3	Simplicity	E	-
3	Customer orientation	E	M
Free association technique			
7	Solution	E	M
5	Product quality	E	M
3	Continuity	E	M
2	Availability	E	M
2	Competence	E	-
2	Innovation	E	M
2	Market share	E	M
2	Social competence	E	-
Projective technique			
4	Price	E	M
5	Product functionality/quality	E	M
2	Solution	E	-
2	Technology	-	M
Summary technique			
7	Continuity	-	M
6	Innovation	-	M
5	Availability	E	M
4	Product quality	E	M
2	Reliability	E	M

E: Engineering / M: Management

Based on the high frequency identified with the critical incident technique, the perception of competence seems to have a strong impact, which both business functions value. In this case, both business functions value the competence of product knowledge. The second group of relevant factors are the clarity of communication and appearance, the reaction time and the perception of solutions for the particular automation project. In addition, the product quality and, to a certain degree, the price are valuable brand association factors. Interestingly, the price aspect only appeared during the projective technique. The price factor seems to be a topic by which to judge a brand; nonetheless, other aspects are more relevant during the actual interaction and the accomplishment of the best possible solution seems to be in the foreground. The continuity and availability of products and the contact person are further valued aspects. The brand association factors with a high frequency are supported by both business functions and there seems to be a large overlap between the business functions compared to Case 1, which can be

explained by the management being very close to the operative business. On the other hand the management seems to have a particular interest in the continuity, innovation and technology. The engineering focuses on the solution, the simplicity of it and the social and product competence. Table 41 reveals the identified specific brand association factors.

Table 41: Cross analysis case 2 - business function-specific brand association factors

Brand association factors	Frequency	Importance
Engineering		
Simplicity	3	6
Interest	2	5
Structure	2	4
Engagement	2	3
Management		
Logic	1	2
Objectiveness	1	2

As recognised, the engineering function values simplicity, particularly the simplicity of the products. Apart from that, the engineering values the perceived attitude, in particular the interest and the engagement. Furthermore, the general structure of the communication is valued by the engineering. The management has a particular interest in the perception of logic and objectiveness. These specific brand association factors demonstrate that the engineering's perspective is influenced by his responsibility to work out a solution and implement it. In comparison to the engineering of Case 1, the valued attitude seems to be closer to the purchasing perspective of Case 1. The management in this case also values the attitude, but in a more general way, which corresponds to the management perspective of Case 1. The particularities are seen to help create a complete picture of the business function perspectives and disclose that the valued factors are embossed by the tasks for which the business functions are responsible.

4.1.2.4 Conclusion to brand association factors in case 2

The company is focused on designing, assembling and programming control boxes and setting up the system at the spot. The realised control boxes are generally project specific solutions, which contain standard products and are programmed towards the specific requirements (see Section 3.4.3). The following Table 42 presents the main identified brand association factors.

Table 42: Brand association factors case 2

Brand association factors		
-Competence	-Product quality/functionality/	-Clarity
-Solutions	-Product practicality/simplicity	-Openness/transparency
-Availability	-Price	-Reaction time
-Innovation	-Detail information	-Continuity
-Understanding of requirements/application		-Customer orientation
-Reliability		
Engineering	Management	
-Simplicity	-Logic	
-Interest	-Objectiveness	
-Structure		
-Engagement		

The buying centre values competence, solutions, availability, innovation, reliability and understanding of requirements and application. In comparison to case 1, competence addresses the supplier’s knowledge of his or her own products and its applications. The clarity, reaction time, openness, transparency, continuity and the perceived customer orientation are valued brand association factors. The company also states to develop open and flexible solutions. On the other hand the company’s statement of being successful through continuous improvement and close co-operation does not directly appear as a valued factor. In comparison to the broad term capability of Case 1, the buying centre of Case 2 has a narrower perception and focuses on the availability and the understanding of requirements. Corresponding to Case 1, the product quality/functionality and the price are perceived factors. Nonetheless, the price aspect seems not to be as relevant as in Case 1. This is explained through the fact that the purchased volumes in Case 2 are not as high and the realised solutions are customised. A further specific factor of Case 2 is the value of information detail. In accordance to one of the engineering functions, the absence of detail information at the beginning of the evaluation process can lead to elimination of a considered supplier brand (Engineering “EPH” Case 2, interview, 12 August 2012). Similar to Case 1, the engineering mentions some relational aspects and thereby describes the value of long-term contact with competent sales staff. The engineering has a focus on attitude factors, which is comparable to the purchasing perspective of Case 1. This appears to result from the extended area of duty—placing orders and the function as a project leader. The management appears to have a strong tendency to the technical part; nevertheless, does not assume specific operative tasks and therefore does not perceive the corresponding factors.

4.1.3 Case 3 - brand association factors

In Case 3 the buying centre is formalised and the composition is independent of product or a purchase item and is composed of five members and business functions (see Table 43).

Table 43: Buying centre members in case 3

Function	Job description	Education	Age	Years with company
Engineering	Head of electro engineering	BSc in electrotechnology, executive MBA	39	6
Purchasing	Head of production, assembly and purchasing	Apprenticeship in industry mechanics, education in operations, professional college in technical operations, quality management education, postgraduate in business administration studies	40	7
Management	CEO, President of the Strategic Board	Apprenticeship in precision mechanics, commercial diploma, BSC in mechanical engineering, postgraduate in general management	47	18
Sales	Head of sales	Apprenticeship in tool mechanics, commercial diploma, specialised marketing education	52	30
Finance	Head of finance, human resources, marketing and sales	Apprenticeship in commercial education, human resources education	53	30



The head of electronics engineering, the purchasing function and the CEO are known business functions of Case 1 and 2. Somewhat extraordinary was the participation of the salesperson and the finance business function. The explanation lies in that the sales member is a longstanding employee, is part of the extended board and that the sales occasionally accomplishes some preliminary investigations, which he hands over to the engineering. The explanation for the participation of the finance business function lies in that the member is one of the two siblings leading the company, is also a long-term member of the company, and is therefore part of the board.

4.1.3.1 Engineering perspective

As in Case 2, there were 25 brand association factors identified during the course of the business relationship (see Table 44). These were identified by the critical incident technique and the amount appears compatible to the 27 of the engineering business function in Case 1.

Table 44: Engineering perspective case 3 - brand association factors

Case 3 Engineering brand association factors – methods triangulation						
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence
19	13	32	Solution	Customer orientation	3	1,7
11	5	16	Competence	Relationship	2	1,5
9	5	14	Detail information	Competence	1	4
8	3	11	Responsiveness	Culture	1	2
8	3	11	Speed	Reliability	1	2
7	3	10	Product functionality/quality	Solutions	1	3
5	3	8	Openness			
4	2	6	Clarity	Projective technique		
4	2	6	Continuity	Customer orientation	2	2
4	2	6	Respect	Innovation	2	3
3	1	4	Added value	Price/performance	2	2,5
3	1	4	Availability	Product functionality/quality	2	2
2	2	4	Business-like	Awareness	1	1
3	1	4	Flexibility	Expensive	1	2
3	1	4	Interest			
3	1	4	Simplicity			
3	1	4	Social competence	Summary technique		
2	2	4	Technology	Relationship	1	1
3	1	4	Valuation	Price/performance	1	2
2	1	3	Understanding of language	Long-term thinking	1	3
2	1	3	Understanding of requirements	Solution orientation	1	4
1	1	2	Customer orientation	Partnership	1	5
1	1	2	Price/performance			
1	1	2	Relationship orientation			
1	1	2	Transparency			

 Solution	 Continuity	 Relationship
 Competence	 Customer orientation	
 Quality	 Price	

The focus of the engineering business function (E) seems to be on the perception of solutions (♦). The solution orientation and the specific solutions for applications, new solutions and generally solutions to simplify a process are valued aspects. Competence (◆) is the second valued brand association factor. Competence seems to focus on product-specific knowledge; on the other hand, the general technological knowledge is also appreciated. *“I appreciate a competent person who can answer my questions... has to know more about the product than me.”* (Engineering “E” Case 3, interview, 9 September, 2012) As in Case 2, the engineering values detail information and speed of the supplier brand. A further relevant factor seems to be the responsiveness. *“He shall be able to reflect what we expect from the product.”* (Engineering “E” Case 3, interview, 9 September, 2012) As in the other cases, the product quality/functionality (◆) represents one of many factors during the business relationship; nevertheless, is accentuated by the

result of the projective technique and the appearance during important touchpoints. Also supported by the summary technique is the continuity (◆) factor. The customer orientation (◆) aspect is only identified once with the critical incident technique; however, it is strongly enforced through the results of the free association and projective techniques. The frequency of this topic seems to be influenced mainly by a recent incident, where one of the main suppliers (unspoken) decided to follow an incongruent strategy. As in the other cases, price (◆) is one of the many factors during the business relationship; however, in this case the engineering business function strengthens the factor by the summary statement and the results of the projective technique. The perceived relationship (◆) and the value of partnership are also underpinned by the results of the other exploration techniques. During the free association technique the engineering describes one of the brands as “...we feel ourselves in good hands...” and defines another brand as “...feathering relationship...” (Engineering “E” Case 3, interview, 9 September, 2012).











Comparable to Case 2, the engineering values a brand with sophisticated product competence, which is able to work out solutions, provide detail information, is clear in the appearance and ensures availability of simple quality products. On the other hand the engineering function seems to have a stronger emphasis on the perception of solutions and values partnership and a close relationship. The price seems to be more relevant, as in Case 2. A further interesting aspect is that the engineering perceives and values different attitude factors; for example, respect, valuation and general interest.

4.1.3.2 Purchasing perspective

Although only 18 identified brand association factors have been identified, the purchasing business function (P) in Case 3 is found to have an extraordinarily diversified perspective of a supplier brand (see Table 45). One explanation is in the set area of duties, which includes responsibility for production but does not include any active search for suppliers. This latter task is mainly allotted to the engineering business function.

Table 45: Purchasing perspective case 3 - brand association factors

Case 3 Purchasing brand association factors – methods triangulation							
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence	
7	5	12	Competence	Quality	2	1,5	
5	3	8	Adherence	Clarity	1	1	
5	3	8	Solutions	Continuity	1	2	
4	2	6	Willingness to take over responsibility	Engagement	1	3	
2	2	4	Flexibility	Pricing	1	3	
3	1	4	Honesty	Support	1	2	
3	1	4	Partnership	Understanding of requirements	1	4	
2	2	4	Reliability				
3	1	4	Trustworthiness	Projective technique			
1	1	2	Accurateness	Technology	2	3	
1	1	2	Availability	Availability	1	1	
1	1	2	Clarity	Functionality	1	2	
1	1	2	Continuity	Solutions	1	2	
1	1	2	Fairness	Competence	1	3	
1	1	2	Product functionality/quality	Customer orientation	1	4	
1	1	2	Proximity				
1	1	2	Simplicity	Summary technique			
1	1	2	Transparency	Competence	1	1	
				Transparency	1	2	
				Honesty	1	3	
				Continuity	1	4	
				Partnership	1	5	

 Competence	 Honesty	 Clarity	 Transparency
 Reliability	 Partnership	 Continuity	
 Solutions	 Availability	 Quality	

The first two brand association factors (competence and adherence) seem to match with the identified factors of the purchasing function in case 1. As in the analysis of the management function of case 1, the adherence (♦) is seen as a particular aspect of reliability. The value of competence (♦) is enforced by the findings of the summary and the projective technique. The value of knowledge seems to focus more on technical competence than to the purchasing of case 1. “I appreciate it when the key account manager has a technical background...does not have to talk about percentage numbers...” (Purchasing, “P” Case 3, interview, 12 October, 2012) One explanation could be that the responsibility of the purchasing business function in Case 3 is much wider, as he also takes care of production and has a higher technical education. So far, the willingness to take over responsibility has been exclusively identified in the engineering perspective of Case 1. More purchasing particular factors are the perceived accurateness and the value of honesty (♦) and partnership (♦), which are both also

identified with a second technique. The attitude towards transparency (◆), availability (◆) and the capability of clarity (◆) are further valued brand association factors identified by a second technique. As in the other cases, the product quality (◆) is enforced by the results of the other exploration methods. Corresponding, the factor continuity (◆) is supported by the free association technique and the summary statement. Very interesting is that the price factor is only identified through the free association technique. Also noticeable is that relational aspects have not been identified.








The purchasing function's perspective seems to be stained to some degree by the technical background and the responsibility for the production. Nonetheless, the value of reliability and honesty show a purchasing-specific perspective. The brand association factors (availability, clarity and the emphasis on continuity) demonstrate a relation—purchasing mainly standard products to sell customised investments—with Case 2 (see Section 3.4.6).

4.1.3.3 Management perspective

The management function (M) in Case 3 is the CEO and is one of the two siblings on the board who lead the family-owned business. The direct involvement of management during the business relationship seems to be similar to Case 2 and therefore much higher than in Case 1. The following Table 46 presents the identified brand association factors of the management in Case 3.

Table 46: Management perspective case 3 - brand association factors

Case 3 Management brand association factors – methods triangulation							
Importance	Frequency	Sum			Free association technique	Frequency	Sequence
			Adapted critical incident technique				
15	8	23	Competence		Clarity	1	1
9	4	13	Solutions		Global	1	1
5	3	8	Product functionality/quality		Reliability	1	1
5	2	7	Systematic		Customer orientation	1	2
4	2	6	Accuratness		Engagement	1	2
4	2	6	Transparency		Technology	1	2
3	2	5	Reliability		Development	1	3
3	1	4	Clarity		Performance	1	4
3	1	4	Consistency				
3	1	4	Cost consciousness		Projective technique		
3	1	4	Capability		Development	1	1
3	1	4	Fairness		Product quality	1	1
3	1	4	Logic		Simplicity	1	1
3	1	4	Modernity		Continuity	1	2
3	1	4	Price/performance		Size	1	3
3	1	4	Responsiveness				
3	1	4	Speed		Summary technique		
3	1	4	Understanding of requirements		Reliability	1	1
2	1	3	Orderliness		Best price	1	2
1	1	2	Openness		Competence	1	3
1	1	2	Trustworthiness				

 Competence	 Clarity	 Development
 Quality	 Capability	
 Reliability	 Price	

The management values the knowledge of possible solutions, the product knowledge and perceives the technical competence (♦), which he underpins with the summary statement: “I focus on the know-how...it is important to get hold of a competent person.” (Management “M” Case 3, interview, 9 September, 2012) The next brand association factor is the value of solution orientation throughout the business relationship. The focus should be on solving the problem and not on presenting the company. (Management “M” Case 3, interview, 9 September, 2012). Apparent is the high emphasis on the product quality and functionality (♦), also identified with the projective technique. A further pronounced factor is the perception of reliability (♦), also identified with the free association and summary techniques. The management further values the systematic, accurateness and the perceived transparency and clarity. Clarity (♦) is also the first mentioned topic during the free association topic. In line with the management function, the summary statement enforces the relevance of the price/performance (♦) factor.

The management function seems to value a supplier brand with a wide technical competence, which is capable of working out and offering reliable solutions that comprise quality products for an attractive price.

4.1.3.4 Sales perspective

As mentioned during the introduction of Case 3, the sales function (S) appears to have an inherent role in the company. Due to the status, the sales function occasionally accomplishes some preliminary investigations for possible solutions on behalf of an acquired customer project, which the sales function forwards to the engineering. Following Table 47 presents the identified brand association factors of the sales person.

Table 47: Sales perspective case 3 - brand association factors

Case 3 Sales brand association factors – methods triangulation							
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence	
10	4	14	Competence	Partnership	1	1	
8	3	11	Openness	Quality	1	1	
7	3	10	Reliability	Customer orientation	1	2	
6	3	9	Solutions	Relationship	1	2	
3	1	4	Detail information				
3	1	4	Speed	Projective technique			
3	1	4	Structure	Reliability	3	1,3	
3	1	4	Understanding of requirements	Functionality	1	1	
2	1	3	Availability	Price	1	2	
2	1	3	Honesty	Quality	1	3	
2	1	3	Product functionality/quality	Solution	1	2	
1	1	2	Fairness				
1	1	2	Price/performance	Summary technique			
1	1	2	Respect	Awareness	1	1	
				Competence	1	2	

 Competence	 Solutions	 Price
 Reliability	 Quality	

Based on the frequency, the identification within influential touchpoints and the recurrence during the summary technique, the sales function seems to emphasise the value of competence (♦). Besides the general product and technical knowledge, the sales function particularly values the knowledge of product limitations (Sales “S” Case 3, interview, 9 September, 2012). Besides openness, the perceived reliability (◆), also identified with the projective technique, is valued as the sales depend on it to satisfy the company’s own customers (Sales “S” Case 3, interview, 9 September, 2012). The same

applies for the perceived product functionality/quality (◆), which is supported by the results of the free association and projective techniques. Besides the sales values, a solution orientation (◆) and innovative solutions to an attractive price (◆) are both also identified with the projective technique. Interestingly, the sales function states that “one of the most important aspects of a supplier brand is to reach awareness” (Sales “S” Case 3, interview, 9 September, 2012).

In summary, the sales business function looks for a competent supplier brand that knows and is open about its limitations, and also offers and reliably delivers quality products with an attractive price.

4.1.3.5 Finance perspective

The finance function (F) also represents a unique business function as a member of the buying centre. Nevertheless, in this case this business function is the member of the two-person board and is one of the two siblings leading the family-owned business. Due to the finance function, the interaction is marginal, which is in line with the diversity of perception. With 10 identified and verified brand association factors, the finance function also has the lowest number of the four cases (see Table 48).

Table 48: Finance perspective case 3 - brand association factors

Case 3 Finance brand association factors – methods triangulation						
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence
3	2	5	Co-operation	Fairness	2	3,5
3	1	4	Competence	Partnership	1	1
2	2	4	Cost consciousness	Relationship	1	1
2	2	4	Management	Technology	1	1
3	1	4	Partnership	Co-operation	1	2
1	1	2	Respect	Customer orientation	1	2
1	1	2	Responsiveness	Transparency	1	3
1	1	2	Social competence	Product quality	1	4
1	1	2	Solutions			
1	1	2	Trustworthiness	Projective technique		
				Customer orientation	1	1
				Summary technique		
				Competence	1	1

 Co-operation	 Partnership
 Competence	 Customer orientation

Based on the frequency and the identification within influential touchpoints and the recurrence in a second technique, the leading brand association factors appear to be co-operation (◆), competence (◆) and partnership (◆). The co-operation is mainly perceived through the interaction with the finance department of the supplier and points to the value of perceiving the readiness to find solutions during a shortage (Finance “F” Case 3, interview, 9 September, 2012). The competence refers to the perceived product knowledge. The value of customer orientation (◆) is identified by the free association and projective techniques. Further aspects are the perceptions of management quality and cost consciousness, which are perceived through the appearance of the salesperson and the number of mailings, which the finance department sorts out and distributes (Finance “F” Case 3, interview, 9 September, 2012).

Although the window of perception is quite narrow, the finance function also perceives competence and values customer orientation, co-operation and partnership.

4.1.3.6 Cross analysis

The cross analysis begins with the comparison of the business functions’ brand awareness and the relative ranking (Table 49), continues with an analysis of the overlapping brand association factors and closes with a reflection of the specific business function factors.

Table 49: Brand awareness and ranking case 3

Sequence	Ranking	Engineering	Ranking	Purchasing	Ranking	Management	Ranking	Sales	Ranking	Finance
1	2	Brand 3	1	Brand 1	3	Brand 12	1	Brand 5	3	Brand 11
2	1	Brand 2	2	Brand 15	2	Brand 15	2	Brand 11	4	Brand 1
3	4	Brand 14	4	Brand 13	1	Brand 3	5	Brand 8	1	Brand 12
4	3	Brand 12	5	Brand 4	4	Brand 11	3	Brand 7	4	Brand 15
5	5	Brand 10	3	Brand 9			4	Brand 6	2	Brand 13

Although the company in Case 3 is the smallest and the buying centre members are stated to be constant, the brands in mind are rather heterogenic compared to Cases 1 and 2. Interesting to see is that all of the brands that the finance function mentioned correspond to at least one of the brands the other business functions mentioned. This seems sensible as the finance is believed to be regularly confronted with all of the main supplier brands through the incoming invoices. The highest overlap is then also between the finance and

two of the business functions; on the one hand the management and on the other hand the purchasing. All three brands seem to be anchored in the minds of the three business functions, whereby the perception of brand performance seems to differ between the business functions. Luckily, all three brands (brand 15, 12 & 11) happened to be utilised for the free association and projective techniques, which enables further investigation.

Brand 15 is rated the same by management and purchasing, yet in comparison is rated quite low by finance. The finance function so far did not have any contact with the brand. On the other hand, the finance remembered what car the salesperson drives. As the finance function apparently had no experience with the brand, it seems somewhat surprising that the finance appears to have this brand in mind and rated the brand performance as relatively low. Due to behaviour during the interview, it seems that the finance related the rating to a specific experience, possibly a finance issue, which the member did not want to use to characterise the brand. The management and the purchasing function, more or less, mentioned similar aspects, seeing the brand as an international company with state-of-the-art mass products. Therefore, the characterisation and the rating by the management and the purchasing seem to fit.

Concerning the supplier **brand 12**, the finance and engineering mentioned positive aspects. On the other hand the management function perceives negative aspects about the brand. The engineering values the brand's high quality, the know-how and the understanding of the requirements (Engineering "E" Case 3, interview, 9 September, 2012). The finance sees the supplier brand as very co-operative due to their fair terms of payment (Finance "F" Case 3, interview, 9 September, 2012). On the contrary, the management perceives the brand's employees as unmotivated and the brand's management and deliveries are perceived as complicated (Management "M" Case 3, interview, 9 September, 2012). Although the finance has a positive picture about the brand, the finance perceives the relationship as almost too intimate (Finance "F" Case 3, interview, 9 September, 2012). The rating of the finance and the management fits with the characterisation. On the other hand the rating by the engineering seems quite low compared to the characterisation; nevertheless, the higher ranked brands could be even better.

Concerning **brand 11**, all of the business functions, except that of the purchasing, agree on the poor product performance. The perceptions about the product performance are very

similar, except the perception of the purchasing function who sees only positive aspects; the others see an insufficient development. The purchasing function has an entirely different perception to the others. The other four see the relationship going in a bad direction and the brand not developing itself, particularly product-wise. Finance criticised the reluctance to not communicate in an open and honest way (Finance “F” Case 3, interview, 9 September, 2012) and the management was not pleased about the brand’s development and the absence of focus (Management “M” Case 3, interview, 9 September, 2012). Although the sales agree about the bad product performance, the sales also value the past long-term partnership (Sales “S” Case 3, interview, 9 September, 2012). The sales function and partly also the engineering acknowledge that the products used to fit the requirements, but no longer do. The rating by the finance and the management fits with the characterisation. On the other hand, the sales rating is quite high compared to the statement that the activities do not fit. The rating seems to be mainly influenced by the appreciation of the past partnership and the sales relates to the current quality and the reasonable price.

The low overlap of mentioned supplier brands appears surprising as during the previous analysis the business functions’ field of action seemed more overlapping than in the other cases. The rating seems to generally fit with business function characterisation of the supplier brands, although in one case the rating of the finance business function appeared to be contradictory towards the characterisation. Corresponding to the sales rating of brand 11, the rating appears to be accomplished from a more distanced and differentiated perspective. Overall, the differing awareness and the focus on different aspects of the described brands demonstrate the different perspectives of the business functions.

The analysis in Table 50 reveals the factors with highest frequencies that are identified with the different techniques and discloses which of the business functions contributed.

Table 50: Cross analysis case 3 - matching brand association factors

Frequency	Brand association factors	Business functions				
Adapted critical incident technique						
25	Solutions	E	P	M	S	F
23	Competence	E	P	M	S	F
10	Reliability	-	P	M	S	-
8	Product functionality/quality	E	P	M	S	-
7	Openness	E	-	M	S	-
6	Detail information	E	-	-	S	-
5	Speed	E	-	M	S	-
5	Responsiveness	E	-	M	-	F
4	Understanding of requirements	E	-	M	S	-
4	Partnership	-	P	-	-	F
4	Clarity	E	P	M	-	-
4	Respect	E	-	-	S	F
4	Transparency	E	P	M	-	-
Free association technique						
6	Customer orientation	E	-	M	S	F
4	Product quality	-	P	-	S	F
4	Relationship	E	-	-	S	F
3	Partnership	-	-	-	S	F
Projective technique						
6	Product functionality/quality	E	P	M	S	-
4	Customer orientation	E	P	-	-	F
4	Price	E	-	-	S	-
3	Reliability	-	-	-	S	-
Summary technique						
4	Competence	-	P	M	S	F
2	Price	E	-	M	-	-
2	Continuity	E	P	-	-	-
2	Partnership	E	P	-	-	-

E: Engineering / P: Purchasing / M: Management / S: Sales / F: Finance

The value of solutions and competence are frequently identified brand association factors and are supported by all of the buying centre members. As in Case 2, the focus concerning competence is in the perception of product knowledge. The third strongest factor (reliability) is mainly perceived by purchasing, management and the sales function. In this case, the value of product quality and functionality seems to be exceptionally high; the factor is frequently identified during the business relationship and endorsed during the other exploration techniques. As in Case 2, detail information and continuity are valued. The value of openness and speed are iterative brand association factors identified in Cases 1 through 3. The brand association factors of clarity and transparency are also relevant factors in Case 2 and are valued by three of the five business functions; the management, engineering and purchasing. As these two factors (clarity and transparency) and detail information, continuity and the perceived customer orientation recur in Cases 2 and 3, it is assumed that they are particularly valued factors for standard product-supplying brands. A new brand association factor is the perception of respect and is valued by the engineering, sales and finance business functions. Very interesting is the

emphasis on the value of partnership, which is absent in case 2 but also identified in Case 1, albeit at a lower frequency. This finding is explained by the nature of the different business types. Case 2 is a company that assembles standard products for customer-specific control systems. Case 3 also purchases standard products and integrates them into a standard or a customer-specific machine, which is then sold as a machine under the company brand. Case 1 also requires a partnership as the customer-specific components are integrated into their products and also sold as product under the company brand.

The cross analysis of the identified factors during the critical incident technique shows that all five business functions agree on the value of competence and solutions. The finance focuses on the characteristics of the relationship; however, the management business function does not show much interest in general relationship aspects. Interesting is that the sales and the finance have a large overlap in the identified factors according to the free association technique. Table 51 reveals the identified specific brand association factors.

Table 51: Cross analysis case 3 - business function-specific brand association factors

Brand association factors	Frequency	Importance
Engineering		
Interest	2	6
Business-like	2	2
Customer orientation	1	1
Relationship orientation	1	1
Purchasing		
Willingness to take over responsibility	2	4
Proximity	1	1
Management		
Capability	1	3
Consistency	1	3
Logic	1	3
Orderliness	1	2
Sales		
-	-	-
Finance		
Management	2	2

The engineering seems to have the most specific brand association factors in this case. All identified factors are about the attitude of the supplier brand. One explanation is that in Case 3 the engineering is responsible for the final product functioning as planned. As in Case 1, the purchasing values the geographical proximity of a supplier brand. The purchasing perceives the willingness to take over responsibility during warranty issues, which the purchasing also perceives as a very influential occasion. The management

perceives the general capability of the supplier brand and values consistency and logic. As the management is the only one who mentioned the visit to the supplier's facility, the management is the only one who perceives the orderliness of supplier, which should be in accordance with the subject and product the supplier is working with. The identified factors of the sales perspective overlap with the other business functions. The finance-specific factor management, which stands for the perceived values and the efficiency of the supplier brands management, is interesting.

4.1.3.7 Conclusion to brand association factors in case 3

As in Case 2, the company in Case 3 purchases mainly standard products. However, the striving for partnership is distinct in this case, which is also communicated as one of their differentiation statements. The following Table 52 presents the main identified brand association factors.

Table 52: Brand association factors case 3

Brand association factors				
-Solutions -Competence -Reliability -Speed -Understanding of requirements -Respect				
-Product -Detail information -Price				
-Openness -Continuity -Responsiveness -Partnership -Clarity -Customer orientation -Transparency				
Engineering	Purchasing	Management	Sales	Finance
-Interest -Business-like	-Willingness to take over responsibility -Proximity	-Capability -Consistency -Logic -Orderliness	-Awareness	-Management

As mentioned during the cross analysis, the explanation lies in that the company mainly integrates the products and markets the machines under their own brand. For a system provider, as in Case 2, this topic is believed to be less striking, as the added value of the system provider is focused on the assembly of items and writing of the software programme. This constellation in Case 3 seems also to explain the strong emphasis on product quality and functionality.

As in the other two cases, the perception of competence, solutions and speed are seen to be important brand association factors. As in Case 2, the buying centre frequently perceives the understanding of requirements, and the value of detail information is also a frequently stressed topic. The same applies for the perception of reliability, continuity

and clarity. The company also communicates transparency, the fulfilment of individual customer requirements as their differentiation statement and also promises a short decision making process. These attributes seem to have a large overlap with the main valued factors of the buying centre.

The buying centre of Case 3 comprises the most varied business functions of the four cases. Apart from the finance function, the described duties also seem to have a high overlap and many of the decisions seem to be taken by the board, the two siblings. The purchasing function seems to be mainly involved in execution of tasks; however, appreciates the willingness to take over responsibility during warranty issues and prefers geographical proximity. The engineering's responsibility appears to be encompassing, which, besides the emphasis on product competence and solutions, is embossed by the value of interest and business-like behaviour during the termination of a business relationship. Also noticeable is that engineering mentions relational aspects; this might be explained by the fact that the engineering has more interaction with the supplier. On the other side, the sales, finance and engineering functions mention the value of respect for the vis-à-vis; for example, by "*...showing interest also for a small customer...*" (Engineering "E" Case 3, interview, 9 September 2012), "*...not engaging with the counterpart...immediately open[ing] the laptop during a visit...*" (Finance "F" Case 3, interview, 9 September 2012). The management values orderliness during the survey of the supplier facilities, perceives the consistency of the global pricing and values logic. The management perceives the organisational capability during the first contact when clarifying technical aspects. The sales emphasis is on the awareness, which the sales see as one of the most important factors for a supplier brand. The finance perceives the values of the management through the interaction with the finance department of the supplier brand and perceives the efficiency through communication with the supplier brand.

The findings show that the brand association factors are influenced by how the customer's brand occurs in the market. The brand association factors are also influenced by the spectrum of the responsibility and tasks of the business functions, where the extraordinary involvement of the sales function and the wide responsibility of the engineering show. This case points out that internal hierarchy needs to be understood in order to consider the involvement of particular business functions, such as (in this case) the finance function.

4.1.4 Case 4 - brand association factors

The interviewed buying centre members are from the engineering and the purchasing departments (see Table 53).

Table 53: Buying centre members in case 4

Function	Job description	Education	Age	Years with company
Engineering	Head of hardware engineering (HE)	BSc in electrotechnology,	43	18
Engineering	Component engineer (1CE)	BSc in electrotechnology, BSc in industrial engineering	35	14
Engineering	Component engineer (2CE)	BSc in electrotechnology	31	11
Purchasing	Team leader for strategic purchasing of electronics (PE)	BSc in electrotechnology, partly accomplished BSc in business administration	41	6
Purchasing	Team leader for strategic purchasing of mechanical components (PM)	Apprenticeship in electro mechanics, specialised educations in personality development, moderation, mediation and business administration	39	17















The head of hardware engineering, two component engineers and two team leaders of the purchasing department define the group of people who are frequently involved in important purchasing decisions in this company. One of the purchasing functions is responsible for electronics and the other mainly for mechanics. Therefore, five participants representing two business functions are part of the exploration. All five have a technical background and are long-term members of the company. The engineering members and the purchasing responsible for mechanics have been part of the company for more than ten years.

4.1.4.1 Engineering perspective

The exploration of the business relationship identified a relatively high diversity of brand association factors, which were verified with the participants (HE: head engineering, 1CE/2CE: two component engineers). The 36 factors largely correspond with the other three exploration techniques (see Table 54).

Table 54: Engineering perspective case 4 - brand association factors

Case 4 Engineering brand association factors – methods triangulation							
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence	
22	10	32	Competence	Quality	5	2,6	
16	7	23	Openness	Price	4	3,3	
15	7	22	Customer orientation	Size	3	2,7	
18	7	25	Reliability	Customer orientation	2	3,5	
14	7	21	Solution	Continuity	2	1,5	
12	5	17	Reaction time	Flexibility	1	1,0	
14	6	20	Continuity	Honesty	1	1,0	
11	5	16	Detail information	Solution	1	1,0	
10	4	14	Clarity	Added value	1	3,0	
9	4	13	Price/performance	Co-operation	1	3,0	
11	5	16	Product functionality/quality	Support	1	3,0	
7	3	10	Interest				
6	2	8	Technology	Projective technique			
5	2	7	Added value	Quality	4	2,5	
5	2	7	Flexibility	Price	3	1,3	
4	2	6	Strategic fit	Premium	2	1	
4	2	6	Partnership	Competence	1	1	
3	1	4	Accurateness	Solution	1	2	
3	1	4	Credibility	Size	1	2	
3	1	4	Economy of scale	Technology	1	2	
3	1	4	Honesty	Speed	1	3	
3	1	4	Innovation				
3	1	4	Logic	Summary technique			
3	1	4	Simplicity	Solutions	2	1	
3	1	4	Transparency	Openness	1	1	
3	1	4	Understanding of language	Customer orientation	1	2	
3	1	4	Willingness to help	Detail information	1	2	
2	1	3	Ability to improve	Quality	1	2	
2	1	3	Responsiveness	Competence	1	3	
5	2	7	Understanding of requirements				
1	1	2	Availability				
1	1	2	Business-like				
1	1	2	Capability				
1	1	2	Orderliness				
1	1	2	Systematic				
1	1	2	Understanding				

	Competence		Reaction time		Quality		Strategic fit
	Openness		Continuity		Technology		Honesty
	Customer orientation		Information		Added value		
	Solution		Price		Flexibility		

The engineering values competence (♦), identified by three techniques and seems to equally value the product and the technological knowledge. The further influential factor appears to be the perceived openness (♦), also identified with the summary technique. Interesting is the distinct value of customer orientation (♦), with a high frequency and identified with three techniques. This finding appears also in Case 2 and 3; however, not in this intensity. The engineering appears to frequently struggle with component

suppliers, which only partly consider the requirements of case 4 (Engineering “HE” Case 4, interview, 18 December, 2012). Further, the engineering frequently perceives the reliability, the reaction time (♦) and particularly values solutions (♦), which is identified with all four techniques. Corresponding to Cases 2 and 3, the engineering values clarity, continuity (♦), and detail information (♦), whereby the last two are identified with two techniques. This finding seems to fit the assumption that these factors particularly fit customers who mainly purchase standard products or components. The price/performance (♦) factor, identified with the three techniques, is compared to the other three engineering perspectives. Equally, to the other engineering perspectives the product quality is strengthened through the results of the other exploration techniques.



















The engineering values technological knowledge, product knowledge and a brand that is open in its attitude, is customer oriented, is reliable and quickly provides solutions with quality components. Corresponding to Cases 2 and 3, the engineering values continuity, clarity and detail information for the required components.

4.1.4.2 Purchasing perspective

As in Case 1, the purchasing is very diversified in its perspective. During the exploration of the business relationship, 41 brand association factors were identified and were verified with the participants (PE: purchasing electronics, PM: purchasing mechanics). Table 55 shows the combined perspectives of the purchasing responsible for the mechanical and the electronic parts.

Table 55: Purchasing perspective case 4 - brand association factors

Case 4 Purchasing brand association factors – methods triangulation							
Importance	Frequency	Sum	Adapted critical incident technique	Free association technique	Frequency	Sequence	
18	9	27	Openness	Continuity	4	3,5	
12	6	18	Solution	Flexibility	3	2	
8	6	14	Capabilities	Price	3	3,3	
7	5	12	Competence	Willingness to negotiate	3	5,3	
7	3	10	Continuity	Dominant	2	1	
6	3	9	Clarity	Customer orientation	2	3	
6	3	9	Customer orientation	Quality	2	2,5	
6	3	9	Flexibility	Solutions	1	1	
6	3	9	Honesty	History	1	2	
4	3	7	Authenticity	Co-operation	1	2	
5	2	7	Price/performance	Market share	1	3	
5	2	7	Quality	Awareness	1	4	
5	2	7	Social competence	Competitive	1	4	
5	2	7	Transparency	Support	1	4	
4	2	6	Communication (capability)	Trustworthiness	1	4	
4	2	6	Orderliness	Added value	1	5	
4	2	6	Proximity	Technology	1	5	
4	2	6	Systematic	Decision-making power	1	1	
4	2	6	Willingness to learn				
3	2	5	Interest	Projective technique			
3	2	5	Partnership	Price	4	2,3	
3	2	5	Reaction time	Solution	3	2,7	
3	2	5	Understanding of language	Premium	2	2	
3	2	5	Understanding of requirements	Added-value	1	1	
3	1	4	Availability	Familiarity	1	1	
2	2	4	Business like	Quality	1	1	
3	1	4	Practicality	Reliability	1	1	
3	1	4	Willingness to take over responsibility	Development	1	2	
2	2	4	Added value	Innovation	1	3	
2	1	3	Cultivated				
2	1	3	Decision-making power	Summary technique			
2	1	3	Economic efficiency	Openness	1	1	
2	1	3	Experience	Trustworthiness	1	1	
2	1	3	Innovation	Honesty	1	2	
2	1	3	Learning capability	Decision power	1	2	
2	1	3	Willingness to negotiate	Price	1	3	
1	1	2	Relationship orientation	Transparency	1	4	
1	1	2	Reliability				
1	1	2	Respect				
1	1	2	Responsiveness				
1	1	2	Technology				

	Openness		Honesty		Added value		Reliability
	Solution		Price		Decision power		Technology
	Continuity		Quality		Innovation		Trustworthiness
	Customer orientation		Transparency		Development		
	Flexibility		Partnership		Willingness to negotiate		

The purchasing function appears to have even stronger emphasis on the value of openness (♦). Besides perception of the solutions (♦), the purchasing values the general capabilities of the supplier brand; for example, the general performance and the ability of execution and learning. The relevance of the topic solutions is enforced by the recurrence

with the other two techniques. The value of competence is focused on the general technical knowledge. Corresponding to the engineering function continuity (◆), clarity and customer orientation (◆) are important brand association factors. As with the other purchase functions in cases 1 and 3, the aspects of flexibility (◆) and honesty (◆) are valued; identified with two techniques. As expected, the price/performance (◆) factor is a perceived factor during the business relationship and is an extracted factor of all other three exploration techniques. A related valued factor is the perception of the added value (◆) of the solutions, identified with three techniques. Added value stands for the comparison and the differentiation between possible suppliers (Purchasing “PM” Case 4, interview, 18 December, 2012). The quality aspect (◆) is identified during the business relationship with the free association and projective techniques. The reliability factor (◆) is also identified with the projective technique and during the business relationship. Besides openness (◆), the transparency (◆) of the supplier brands action and communication is valued. The factor of trustworthiness (◆) is identified during the free association technique and appears as one of the summary statements. Trustworthiness stands for the fear of trickery and the uncertainty about new Asian brands approaching the market (Purchasing “PE” Case 4, interview, 18 December, 2012). A new factor is the value of decision-making power (◆), identified with three techniques, which is occasionally missing in Case 4. One of the purchasing members even described this factor as one of the most relevant aspects for a supplier brand (Purchasing, “PM” Case 4, interview, 18 December, 2012).

The purchasing values openness, transparency and continuity, values the perceived solutions and is interested in the general capabilities. The competence is focused on technological knowledge. An attractive supplier brand is flexible, honest and provides quality products for an interesting price. Besides partnership, the purchasing values decision-making power and the willingness to negotiate.

The business function-specific analysis identified some particular business function factors and identified some similarities throughout the cases. The specific and corresponding factors are further studied in the following section (Section 4.1.4.3).

4.1.4.3 Cross analysis

The cross analysis starts by comparing the awareness of the five participants (see Table 56). The analysis continues with the analysis of the most frequent and overlapping factors (see Table 57) and ends with the analysis of the business function-specific analysis (see Table 58).

Table 56: Brand awareness and ranking case 4

Sequence	Ranking	Engineering (CE1)	Ranking	Engineering (CE2)	Ranking	Engineering (H)	Ranking	Purchasing (EL)	Ranking	Purchasing (M)
1	1	Brand 16	1	Brand 6	1	Brand 12	1	Brand 7	3	Brand 15
2	2	Brand 19	?	Brand 12	4	Brand 8	1	Brand 3	2	Brand 9
3	3	Brand 18	3	Brand 17	3	Brand 2	2	Brand 4	1	Brand 11
4	4	Brand 20	?	Brand 13	2	Brand 21	3	Brand 14	4	Brand 5
5			2	Brand 10			2	Brand 19	5	Brand 1

CE1 & 2: Component Engineering 1 & 2 / H: Head of Engineering / EL: Purchasing electronics / M: Purchasing mechanics

The buying centre members have the least awareness overlapping of supplier brands. This very heterogeneous result is partly influenced by the fact that no task-specific buying centre is defined. The management merely defined the main employees (business functions) who are involved in the decision process, as no main product or project is defined by management. Apart from the task and the resource-specific composition of the buying centres, the reason for the variety of the mentioned supplier brands seems also to lie in the specialisation of the business functions. Only two brands are shared between two participants. The component engineer and the head of the hardware team had one brand in mind. Although the component engineer mentioned brand 12 and brand 13, the component engineer was reluctant to define any relative ranking, as the engineer did not have any direct contact. The other brand is in the mind of the other component engineer and the purchasing responsible for electronics.

Four out of the five buying centre members also rated the top-of-mind supplier brand as the one with the relative best performance. In this case, no supplier brand achieves a high cross-functional awareness. This fact is found to be a challenge during the projective technique as only one of the predefined brands is familiar for all of the participants.

The aided awareness of this brand (**brand 16**) seems to be high for all of the participants and departments. The engineering perceives the brand's positive handling of discontinuations (Engineering "HE" Case 4, interview, 18 December, 2012). The two purchasing functions do not agree about the flexibility. The purchasing function, which is directly in contact with the supplier, perceives the support as good and perceives prices as good and negotiable (Purchasing "PE" Case 4, interview, 18 December, 2012). In contrast, the engineering perceives the prices as high or even problematic (Engineering "HE" Case 4, interview, 18 December, 2012). The purchasing function, which is in charge for mechanics, perceives the supplier brand as "*stiff and inflexible*" (Purchasing "PM" Case 4, interview, 18 December, 2012), yet is probably hinting at the general reaction towards the new market pressures by the newcomer brand (brand 2). Apart from the differing perspectives concerning the flexibility and pricing, all buying centres agree that the supplier brand in the upper segment offers good quality products, but is struggling with the new market conditions.

Table 57 reveals the factors with the highest frequency, identified with the different techniques, and discloses which of the business functions contributed.

Table 57: Cross analysis case 4 - matching brand association factors

Frequency	Brand association factors	Business functions	
Business relationship			
16	Openness	E	P
15	Competence	E	P
13	Solution	E	P
11	Capability	E	P
9	Customer orientation	E	P
9	Continuity	E	P
8	Reliability	E	P
7	Clarity	E	P
7	Product functionality/quality	E	P
7	Reaction time	E	P
6	Price/performance	E	P
5	Detail information	E	
5	Flexibility	E	P
5	Interest	E	P
Free association technique			
7	Price	E	P
7	Quality	E	P
6	Continuity	E	P
5	Size	E	P
4	Customer orientation	E	P
4	Flexibility	E	P
3	Willingness to negotiate		P
Projective technique			
7	Price	E	P
5	Quality	E	P
4	Premium	E	P
4	Solution	E	P
Summary statement			
2	Openness	E	P
2	Solutions	E	

E: Engineering / P: Purchasing

Openness is more relevant in this case than the others. One explanation for this manifestation is the number of large Asian brands the company is dealing with, which occasionally appear reserved in communication and co-operation. As with the other cases, the perceived competence is valued; the focus is mainly on the general technical knowledge. The value of solution orientation and the perception of product solutions are also a pronounced brand association factor in this case. As in Case 1, the perception of the general capabilities is also distinctive. The value of customer orientation is driven by the dominant suppliers and some of the main components represent relevant subsystems. Apart from the value of continuity, reliability and clarity, the product quality and the price/performance factors are highly relevant brand associations. The large overlap of the frequent brand association factors is noticeable. Table 58 reveals the identified specific brand association factors during the business relationship.

Table 58: Cross analysis case 4 - business function-specific brand association factors

Brand association factors	Frequency	Importance
Engineering		
Detail information	5	11
Fit of strategy	2	4
Accurateness	1	3
Credibility	1	3
Logic	1	3
Simplicity	1	3
Willingness to help	1	3
Ability to improve	1	2
Understanding	1	1
Purchasing		
Authenticity	3	4
Social competence	2	5
Proximity	2	4
Willingness to learn	2	4
Practicality	1	3
Willingness to take over responsibility	1	3
Cultivated	1	2
Decision-making power	1	2
Experience	1	2
Willingness to negotiate	1	2
Relationship orientation	1	1
Respect	1	1

In comparison to the other cases, the number of specific factors is high, which seems to correspond to the rather high specialisation of the business functions. The engineering seems to have a strong emphasis on the value of information detail and perceives the fit towards their own followed strategy. The engineering perceives the simplicity of the product and the attitude and the capability to find solutions and to develop. The purchasing specifically perceives value in authenticity and factors concerning willingness, capability, experience and the value towards relationship and respect.

The two business functions seem to have good agreement in the major factors; on the other hand, they also have a variety of relevant specific brand association factors.

4.1.4.4 Conclusion to brand association factors in case 4

As described in Section 3.4.5, Case 4 represents the company with the highest own value creation, especially concerning the electronics, since the company has their own electronic placement machines. The main purchased items are therefore components. Unlike Case 1, the purchased components in this case are mainly standard components. This circumstance indicates that the dependence between supplier and customer is low (Backhaus & Voeth, 2014). However, some of the most important components, such as microprocessors and touchscreens, are the components on which the company bases and

builds their own products. The company therefore aims to build up a partnership with these suppliers, which despite this case being the largest company within this research project, presents itself as a challenge since the suppliers are highly dominant due to their size and market share.

Table 59: Brand association factors case 4

Brand association factors		
-Competence	-Product quality/functionality	-Openness
-Solution	-Price/performance	-Customer orientation
-Capability	-Detail information	-Continuity
-Reliability		-Clarity
-Flexibility		-Reaction time
-Size		-Willingness to negotiate
Engineering	Purchasing	
-Detail information	- Authenticity	
-Fit of strategy	-Social competence	
-Accurateness	-Proximity	
-Credibility	-Willingness to learn	
-Logic	-Practicality	
-Simplicity	-Willingness to take over responsibility	
-Willingness to help		

Besides the value of competence, the perceived openness seems to be a particular value of this case. The valued factors are found to not particularly match the company's differentiation statement. On the other hand the identified brand association factors largely correspond to the identified factors of Cases 2 and 3, which also purchase standard products or components. In addition, the perception of capabilities also indicates a similarity to Case 1. This is explained by the particular value in the support capability perceived by one of the component engineers. Moreover, the main contribution towards the frequency of this factor comes from the perception of the purchaser responsible for the mechanical components, who purchases mainly customer-specific mechanical components. The emphasis on customer orientation arises from the struggle with large electronic supplier brands, such as Intel and Sharp, which occasionally do not consider the company's requirements with their product portfolio plans. The high variety of business function-specific brand association factors is caused by the higher specialisation of a larger organisation. The purchasing focus on the social competence and the attitude towards learning, responsibility and the supplier's authenticity is interesting. The engineering's specific factors fit with the discovered brand association factors of the engineering's perspective in other cases.

The findings of Case 4 disclose some business type specific brand association factors and suggest that the size of the organisation can, due to the accompanied specialisation, induce a more distinct business function perspective.

4.1.5 Cross analysis - brand association factors

The case analysis has allowed insight into the case specific perspectives. The following analysis discloses the total frequency of the identified brand association factors and aims to identify some comprehensive factors that will allow deduction of some general brand assets (see Figure 9 “1. Brand assets”). Table 60 lists the first 25 identified brand association factors, which are ranked according to the total frequency in all four cases and all exploration techniques; adapted critical incident technique, free association technique, projective technique and the summary technique (see also Appendix E) for the total list).

Table 60: Brand association factors cross analysis

Case 1	Case 2	Case 3	Case 4	Frequency	Brand association factors	Business functions					
30	16	29	18	93	Competence	E	P	M	Q	S	F
12	16	29	28	85	Solution	E	P	M	Q	S	F
25	20	18	20	83	Product functionality/quality	E	P	M	Q	S	F
35	6	10	21	72	Price	E	P	M	Q	S	
30	5	16	9	60	Reliability	E	P	M	Q	S	
9	6	7	18	40	Openness	E	P	M		S	
3	12	7	15	37	Continuity	E	P	M			
2	4	11	14	31	Customer orientation	E	P	M		S	F
17	1	2	11	31	Capability	E	P	M			
8	8	5	8	29	Speed	E	P	M	Q	S	
6	9	5	7	27	Understanding of requirements	E	P	M		S	
9		9	6	24	Partnership	E	P	M		S	F
	8	6	7	21	Clarity	E	P	M			
6	3	7	5	21	Technology	E	P	M			F
6	2	3	9	20	Flexibility	E	P	M			
	6	6	6	18	Detail information	E		M		S	
	11	4	2	17	Availability	E	P	M		S	
3	9	2	3	17	Innovation	E	P	M			
4	2	3	6	15	Honesty	E	P	M	Q	S	
	5	6	4	15	Transparency	E	P	M			F
9	1		2	12	Fits with us	E	P	M			
4	2	2	2	10	Social competence	E	P				F
3	1	3	3	10	Systematic	E	P	M		S	
5		3	1	9	Accurateness	E	P	M			
	2	2	5	9	Interest	E	P				

E: Engineering / P: Purchasing / M: Management / Q: Quality Management / S: Sales / F: Finance

The findings strongly resonate with the values of competence, solution and product quality/functionality for all of the identified business functions. The price/performance

factor is not one of the main issues of Case 2. The reliability is not as important for Cases 2 and 4, but the availability is relevant in these two cases. The openness is recognised as particularly relevant for Case 4. Also, while the continuity and the customer orientation are particularly relevant in Case 4, they are the least relevant for Case 1. A possible explanation is that Case 1 purchases mainly customer-specific components and, compared to the other cases, does not have to worry about discontinuation of products and new releases, which possibly do not consider their requirements. General capability is particularly relevant in Case 1 as the specific components require a supplier brand with various specific capabilities in development, manufacturing and use of technology. Speed and the understanding of requirements are values that are equally appreciated. The value of partnership is not a topic for the system provider in Case 2. The values of clarity, detail information, transparency, availability and interest are the standard product-specific factors. The availability is more relevant for the system provider in Case 2. Flexibility and the values of technology and innovation are topics in all cases.

The first three brand association factors with the largest frequency are valued by all of the identified business functions. The majority of the main brand association factors are appreciated by the engineering, purchasing and management business functions. On the other hand, the total list (see also Appendix E) also shows a high variety among the business functions. The same applies among the cases. Moreover, the Table 60 shows that the relative ranking within the cases varies among the four cases.

The findings regarding the main brand association factors, the cross analysis confirming the variety of perspectives and the findings during the case analysis constitute the basis for the following conclusions about brand association factors and their patterns.

4.1.6 Conclusion to brand association factors

The analyses of the buying centre's perspectives have identified more than 83 brand association factors. The underlying pattern can be structured into five main categories. The analyses have also identified some variation in relation to the companies' communicated added value, the range of business function tasks and the characteristics of the purchased items.

The first three main categories represent the main brand assets (see Figure 9. 1. Brand assets, Table 61); all three assets have various value characteristics.

Table 61: The three brand assets

Knowledge	Capability	Attitude
<ul style="list-style-type: none"> -Technological -Product -Limitations -Engineering -Processes -Procedure -Experience 	<ul style="list-style-type: none"> -Scope/peculiarity -Solutions -Price/performance -Reliability -Speed -Flexibility -Understanding of requirements -Technology -Availability -Innovation 	<ul style="list-style-type: none"> -Reliability -Customer orientation -Openness -Continuity -Speed -Clarity -Flexibility -Honesty -Transparency -Social competence -Accurateness -Interest

Author's own construction

A powerful and consistent brand association factor is perceived as competence. Competence stands for the perceived knowledge of the supplier brand. Perceived knowledge is valued in all the cases and by all of the identified business functions; nonetheless, with a different focus. Apart from the engineering function, the management and purchasing functions also value the perceived knowledge of the supplier brand.

The next main asset category is perceived to be the capability of a brand. This asset includes the scope and peculiar capabilities; for example, the perceived preciseness or the scope of performance the supplier brand is able to accomplish. Various other abilities that are regarded as aspects of capability, which include the ability to offer a particular solution or to be fast and flexible, are also valued. Therefore it is sensible to define the capability aspect as one category, which includes the different valued abilities. The identified capability factors often go hand-in-hand with the following underlying category of factors. The capability of flexibility is, for example, assessed by the perceived infrastructure, the organisation or the perceived process. Flexibility also requires a certain mind-set. For this reason, some of the capability factors are repeated in the attitude category.

The identified attitude factors are related with the aspect of brand personality (see Section 2.1.4) and mainly describe the perceived behaviour; examples include responsiveness, fairness and perceived commitment. The factor of authenticity, although a personality factor, also describes a certain behaviour.

The fourth category identified is defined as the delivery.

Delivery
-Product quality/functionality -Detail information

The main delivery factors are product quality and the functionality. In Cases 2, 3 and 4, the information detail is a further delivery aspect. One additional delivery aspect

that has perceived value is support. The delivery is strongly connected to capability; however, it seemed important to separate the two. The delivery is on the one hand about the experience and leads to the perception of capability. The perception of capability on the other hand occurs in advance of the delivery and is confirmed or disconfirmed by the delivery experience. The delivery is also shaped by competence and attitude. The perceived information sheds light on the competence and also gives some indication about the attitude by sole availability and how the information is presented. The attitude, capability and competence are therefore seen to determine the delivery.

The characteristics of the delivery and interrelation with the capability, competence and attitude, might be well illustrated with the image of a martial artist. The perception of large muscles (capability) can lead to the expectation that a kick could have a massive impact. However, the impact of a punch is also determined by the attitude (motivation, focus) and the knowledge of where and when to hit an object.

The fifth and last category is the relationship. The competence, perceived capability, attitude and the delivery are seen to form the relationship.

Relationship
-Partnership -Fits with us

The buying centre also considers in advance the fit with their own organisation; for example, size and market dominance play a role. Interestingly, arising from the

statements during the interviews, a supplier brand that is much bigger can be perceived as a threat. Based on the identified brand association factors, a relationship is valued that has the characteristics of a partnership; personal relationships are also valued. The buying centre members who frequently interact (engineering and purchasing) are particularly found to value relational aspects. This extends to the pleasing relationship and humanity that are directly associated with the corporate brand.

The characterisation of these defined categories seems to vary depending on the business context and the characteristics of the buying centre.

The brand's share of added value for a particular product or performance influences the relevance. In particular, the customer's own brand communication and their statement about the company's added value influences the compilation of the valued brand association factors. However, the product market segment also influences the perspective. In particular, the valued factors differ on the degree of customisation of the purchased item. Brands selling standard products are perceived differently than brands offering customised solutions. Nonetheless, the customer's dependence on the supplier's brand performance appears to be determining, which can also occur when standard products are purchased. The valued brand association factors only partly overlap with the differentiation statements of the customer's corporation.

The individual brand association factors identified show a high variability. The composition of valued brand association factors appears to be dependent on the area of responsibility. The particularity among the business functions seems to increase with the size of the company. Moreover, an individual's experience and history in a company influences their involvement and extent of responsibilities within the organisation, which result in a diversified view.

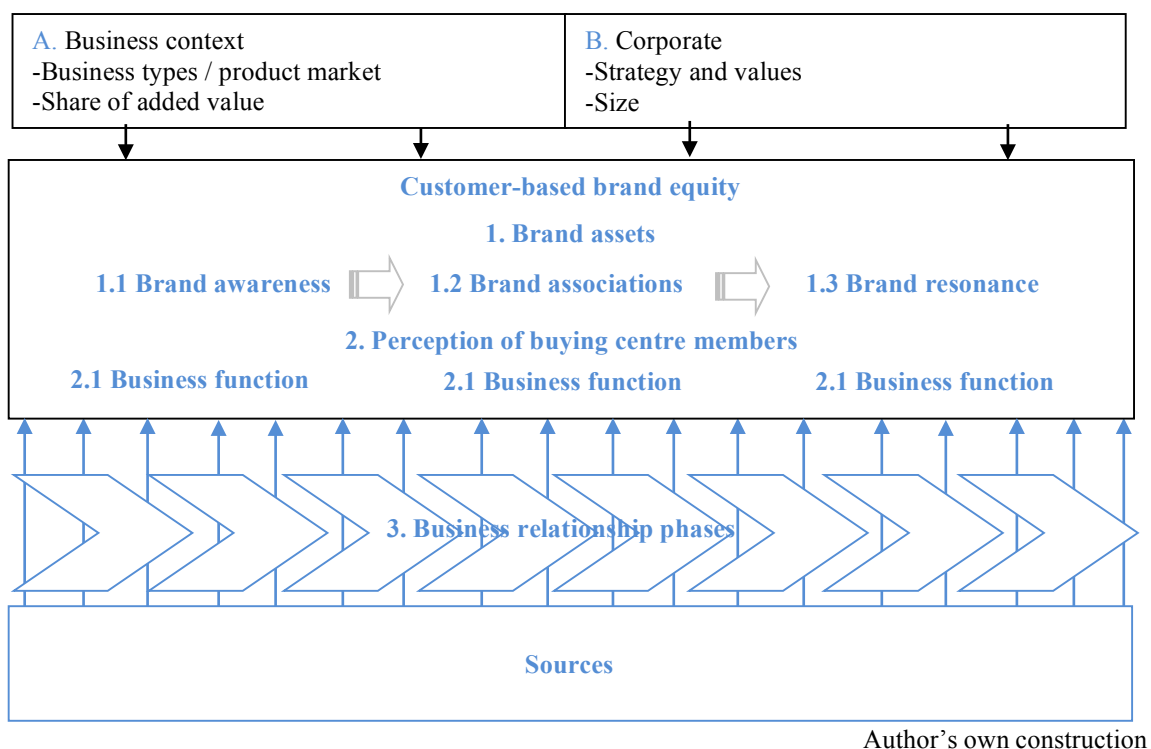
The following analysis looks at the touchpoints and phases of business relationships. The valued brand association factors during these phases are also investigated. The brand association factors are directly allotted to the five disclosed brand association categories.

4.2 Findings related to the business relationship characteristics

The analysis of the business relationship characteristics for each case starts by looking at the relevance of the identified touchpoints and the identified phases and proceeds with an analysis of the sources, channels and the involved business functions. On this basis the phases and the valued brand association factors are examined. The case-specific analysis ends with a conclusion about the identified business relationship characteristics. The analysis continues with a cross analysis of the most important touchpoints, the phases and the interrelated brand association factors, the sources, the channels and the involved business functions.

This part of the analysis aims to disclose influential business relationship phases (3. business relationship phases), the influential touchpoints ("blue arrows") and the influential sources in light of the involved business functions (2.1 business function), the

buying centre (2. Perception of buying centre), the brand associations (1.2 brand associations) and the brand assets (1. Brand assets). See Figure 10.



Author's own construction

Figure 10: Visualisation of the analysis of business relationship characteristics

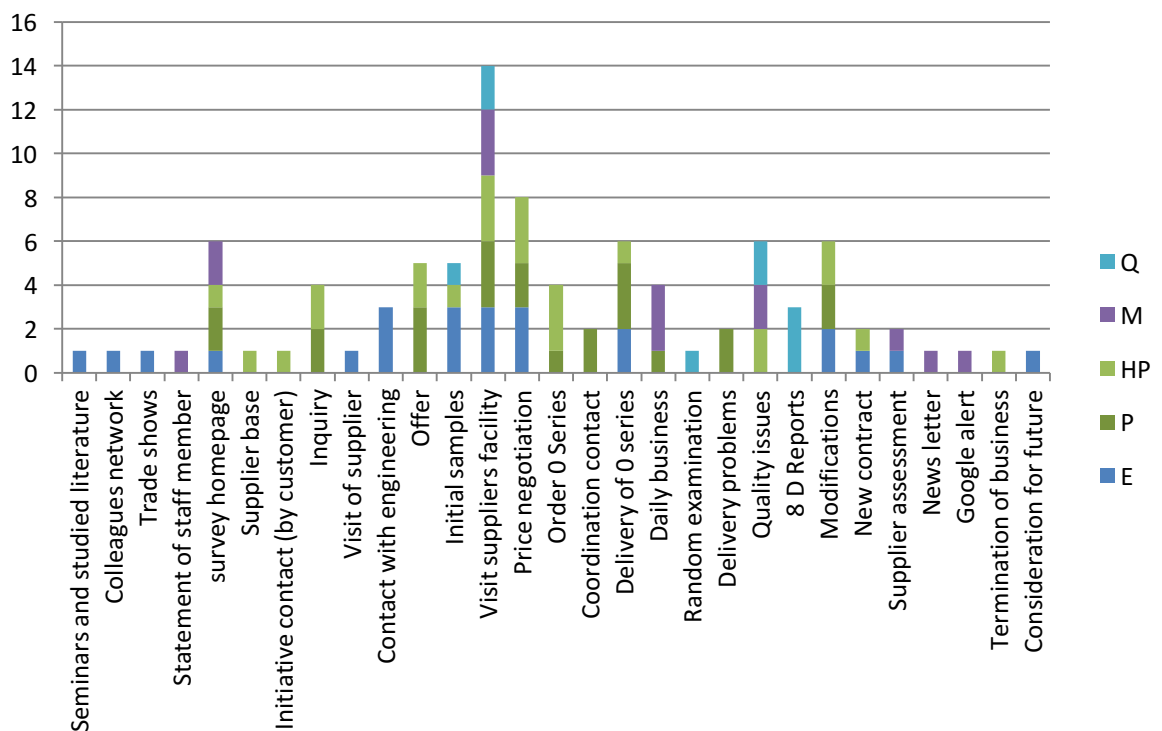
The analysis of the business relationship will investigate the emergence of brand awareness and the characteristics of brand resonance. The case-specific context (A & B) and its influence on the business relationship are also investigated.

4.2.1 Case 1 – business relationship characteristics

As described in Section 3.4.2, a large part of the added value is outsourced in Case 1. Some of the purchased components require a joint development to realise the customer-specific solution. This dependency is reflected in the outstanding value regarding competence and capability and the value of reliability, openness, speed and commitment of the supplier brand (see section 4.1.1.6). The following analysis aims to present the characteristics of this dependent and intense business relationship by looking at the relevance of the touchpoints, the characterisation of the phases and the respective brand association factors. In addition, the sources and channels used are presented concerning the identified phases.

4.2.1.1 Influence of touchpoints

In Case 1, the five members of the buying centre described 29 touchpoints. The rated importance of the identified touchpoints are visualised in Figure 11. A member simply mentioning the touchpoint is visualised by a minimum value of one. The value of two indicates that the members rate the touchpoint as important. The value of three indicates that the members see the touchpoint as very important for the established perception of the supplier brand. More than half (16) of the 29 identified touchpoints are only mentioned by one of the buying centre members. This gives an indication of how distinct the adherence is of these touchpoints and therefore the individual influence on the perception of the supplier brand.



E: Engineering / P: Purchasing / HP: Head of purchasing / M: Management / Q: Quality Management

Figure 11: Importance of touchpoints and involved business functions case 1

The touchpoints with the most influence are first, the visit to the supplier’s facility and second, “price negotiation”. The most influencing touchpoint is also the only point that was mentioned by all of the members and rated as important or very important; thus confirming its importance. The visit to the supplier’s facility influenced the members since they were able to perceive a wide range of characteristics on a single occasion.

The touchpoint “price negotiation” is a very important point for the purchasing and rated as very important by the engineering. The interest of the engineering can be explained by the narrow cost targets and that the engineering recognises their own contribution towards the co-operative development and the consequent influence on the price of the component.

The third group of important touchpoints includes the survey of the homepage, the delivery of 0 series (first serial batch for final verification), quality issues and perceptions during the implementation of modifications. Further influential touchpoints are the offer and perception of initial samples, followed by the perceptions during an enquiry, the order of the 0 series and the perception during daily business.

The engineering and the purchasing have the highest number of touchpoints. Both purchasing functions also have a high number of individual touchpoints. Quality management mentioned the fewest touchpoints after the management function. Due to the high number of touchpoints described by engineering and purchasing, these two business functions are assumed to have the most interaction with the supplier brand and are therefore believed to have the most distinctive associations concerning the supplier brand. During “daily business” the management function relies on the statements of these two business functions, as well as the quality management.

Table 62 shows the touchpoints that the participants rated as very important for their perception of the supplier brand.

Table 62: Cross analysis of very important touchpoints case 1

Touchpoints	E	P	HP	M	Q
Visit suppliers facility	X	X	X	X	
Price negotiation	X		X		
Delivery of 0 series		X			
Offer		X			
Initial samples	X				
Order 0 Series			X		
Daily business				X	
Contact with engineering	X				
8 D reports					X

E: Engineering / P: Purchasing / HP: Head of purchasing / M: Management / Q: Quality management

The visit to the supplier's facility had the highest overall impact on the buying centre's perception. All of the members, except quality management, rated this touchpoint as very important. Regarding the purchasing functions, the operative purchasing function experiences the offer and delivery of the 0 series as very important and the head of purchasing experiences the price negotiation and the occasion of ordering the 0 series as very important. The head of purchasing receives valuable information from touchpoints with more interaction. The operative purchasing focuses more on what is received. Besides the touchpoint "price negotiation", the engineering function sees the contact with the engineering as a very influential touchpoint. Apart from the visit to the supplier's facility, the management sees the daily business as very important, although the management has mainly an indirect perception during this touchpoint. The quality management sees the "8D report" (document that organises the communication and process during a quality issue) as the most influential touchpoint.

The business functions seem to have a different view on which touchpoint is most influential. The engineering and purchasing seem to have the most differentiated view of the touchpoints. The touchpoint with the highest impact is the visit of the supplier's facility. This is logical as many suppliers of case 1 produce customer-specific components under contract. The relevance of price negotiation and delivery of the 0 series seem in line with the emphasis on price and quality, identified in Section 4.1.1.5. Interesting is that the engineering's first touchpoint is the contact during studies, which even led him to contact this brand during one of his first jobs (see Figure 11). A further interesting touchpoint is the perception through the network of internal colleagues, which in one case led to an award of contract. One of the last touchpoints, as mentioned by the engineering, can complement this network aspect. The engineering explicitly mentioned that a good "last" experience remains in mind and results in the supplier brand possibly being considered in future tasks (Engineering "E" Case 1, Interview, 2 February, 2012). Apart from the reference during studies, personal contacts and their networks create the first awareness. The next influential touchpoint is the survey of the supplier brand's homepage, which purchasing and management rated as important.

The identified touchpoints seem to have a logical procedure; however, the participants frequently mentioned that the procedure would depend on different factors, such as the complexity of the product or the geographical proximity of the supplier. The presented touchpoints therefore do not have a definite order. Nonetheless, the exploration of the

business process and the touchpoints identified a certain pattern of phases, which are defined by the underlying motivation or a particular relationship activity.

4.2.1.2 Phases, channels, sources and involved business functions

In Case 1, a total of 10 phases are identified in the business relationship (see Table 63). They start with a first possible perception of a supplier brand and end with the buying centre having a good experience in mind. As defined, the individual phases include touchpoints that are caused through the same motivation or have a particular process characteristic.

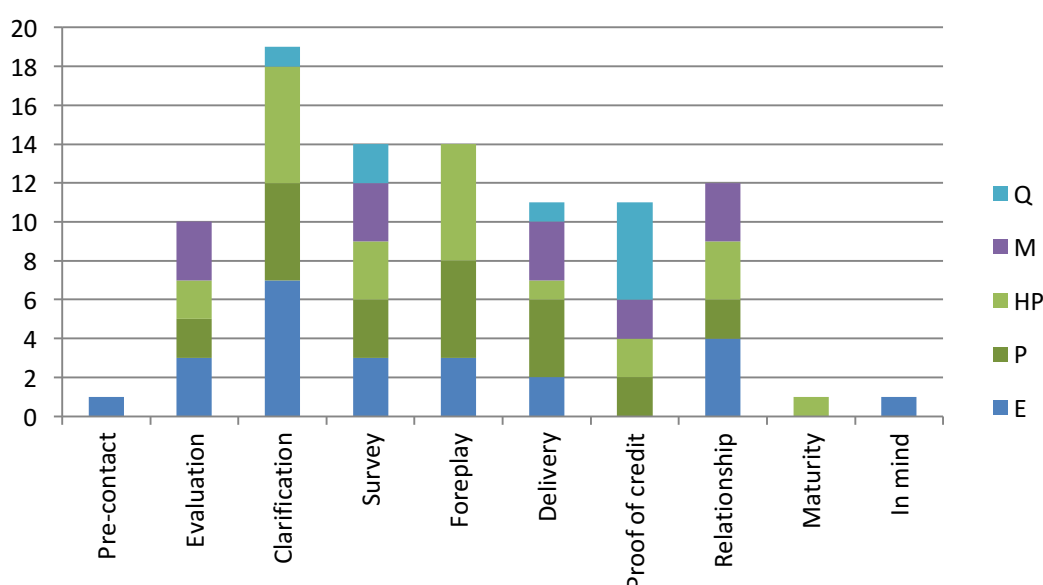
Table 63: Touchpoints and phases case 1

Touchpoints	Seminars and studied literature Colleagues network Trade shows Statement of staff member Survey homepage Supplier base	Initiative contact (by customer) Inquiry Visit of supplier Contact with engineering Offer Initial samples	Visit suppliers facility	Price negotiation Order 0 Series Coordination contact	Delivery of 0 series Daily business Random examination	Delivery problems Quality issues 8D reports	Modifications New contract Supplier assessment News letter Google alert	Termination of business	Consideration for future	
Phase	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	In mind

The engineering function mentioned only one touchpoint during the pre-contact phase, which represents the phase where the buying centre perceives potential supplier brands; nevertheless, they do not have any particular need. The following touchpoints are all mentioned in relation to a particular task and the evaluation of potential supplier brands. After the evaluation phase, some of the identified supplier brands are contacted to clarify the possibilities and requirements. The next phase, the survey phase, only comprises one touchpoint, that being a visit to the supplier’s facility. Although this touchpoint is part of the clarification process, it is a very influential activity that allows the customer to look behind the facade. The next phase is the foreplay phase. During this phase a give and take appears during the price negotiations and the first promises and expectations are challenged. The first deliveries are found to be carefully observed during the delivery of the 0 series, the first daily business experiences and random examinations. A further phase and also a delicate phase is the proof of credit phase, where the buying centre’s invested trust is challenged. Interestingly, the buying centre does not expect zero failures; and

rather carefully examines the reaction of the supplier brand (Purchasing “P” Case 1, interview, 7 January, 2012; Purchasing “HP” Case 1, interview, 25 July, 2012; Management “M” Case 1, interview, 22 July, 2012; Quality management “Q” Case 1, interview, 5 July, 2012). The relationship phase includes possible adaptations, renewal of agreements and joint improvements. As with many relationships, a relationship can reach the phase of maturity and the termination of business. A termination, however, does not have to remain a definite status. New circumstances may lead to a reunion or the convinced business function may take the experience to the next employee.

In Case 1 the clarification phase seems to be the most influential phase, followed by the survey and the foreplay phases (see Figure 12). Interestingly with regard to the cumulative rating, the evaluation phase is seen as having a similar relevance for the perception of the brand, as the delivery, the proof of credit and the relationship phases.



E: Engineering / P: Purchasing / HP: Head of purchasing / M: Management / Q: Quality Management

Figure 12: Importance of phases and involved business functions case 1

The sales of the supplier brand and the engineering business functions have the most influence throughout the business relationship phases (see Table 64). Apart from the product, the buying centre’s colleagues and employees are also sources for perception. As recognised during the analysis of the touchpoints and the relevance of the phases, the engineering and the purchasing business functions are those functions who are mainly involved; the management and the quality management by comparison only perceive the supplier brand occasionally.

Table 64: Phases, sources and involved business functions case 1

Phase	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	In mind
Sources										
Sales			x	x	x	x	x	x	x	
Engineering			x	x	x		x	x		
Products		x			x	x	x			
Colleagues/employees		x				x		x		
Professor	x									
Staff		x		x						
Organisation				x			x			
Supplier information		x								
Brand communication	x	x								
Reception			x							
Physical evidence				x						
Accuracy of delivery						x				
Search algorithm								x		
Experience										x
Business functions										
Engineering	x	x	x	x	x	x		x		x
Purchasing		x	x	x	x	x	x	x	x	
Management		x		x		x	x	x		
Quality Management			x	x		x	x			

The perception starts with brand communication or recommendations from independent sources and goes on by acknowledging the brand through their own network, the products and partly by contact with some of the supplier staff. The subsequent sources become more people centric or business function centric. The communication then seems to focus on very interactive media such as face to face and telephone or the interaction by email (see Table 65).

Table 65: Phases and channels case 1

Phase	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	In mind
Channels										
Face to face		x	x	x	x	x	x	x		
Email/telephone		x	x		x	x	x	x	x	
Documents	x		x	x	x		x	x		
Visual appearance		x		x	x	x				
Product performance					x	x	x			
ERP system		x				x				
Internet		x						x		
Books	x									
Mind										x

The business relationship starts with one-way communication and proceeds to include some interactive channels. This interactivity and the channels used increase as the relationship progresses. The influential sources in the beginning are the brand communication; the brand appears as an anonymous group. During the process the sources become more focussed towards the people or business function; the supplier's engineering and sales business functions are found to be the main influential team members.

4.2.1.3 Phases and the main valued brand association factors

The following analysis presents the main brand association factors of each phase. The factors are listed in the order of relevance, starting with the brand association factor with the highest frequency.

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

Phase:	Pre-contact
Factors:	-Competence -Experience

The identified pre-contact phase in case 1, includes only one touchpoint, the engineering's perception of a brand during studies. The pre-contact phase

represents touchpoints where the buying centre is in a passive role and perceives the communication of the supplier brand or is contacted by the supplier. The valued factors are competence and experience, which the engineering perceives through references from

the professor, textbooks and documents prepared by the brand. In comparison to the next phase, the buying centre is not actively looking for a potential supplier.

Phase:	Evaluation
Factors:	<ul style="list-style-type: none"> -Capability -Solutions -Reliability -Price -Proximity -Strategic fit

During the evaluation phase the buying centre evaluates potential suppliers. In this case the initiation to evaluate potential suppliers is driven mainly by a specific product development. The purchasing, the management and the engineering

are involved during this phase. The engineering and the management seem to see this phase as particularly relevant for their perception. The main brand association factors are the capability (performances), the perception of solutions and the reliability. The price is estimated by looking at the structure of the company and also the geographical proximity. The strategic fit is perceived by looking at the size and general setup of the company. Except for the touchpoint “trade shows”, the identified touchpoints during the evaluation phase are not interactive. The buying centre forms their opinions merely from information that has been placed in the market and appears to focus on capability aspects and relationship aspects. Possible sources of information include the supplier’s own information base, the opinions and experiences of colleagues and the brands communication. The main influence seems to be the brands communication through the homepage website.

Phase:	Clarification
Factors:	<ul style="list-style-type: none"> -Competence -Accurateness -Experience -Price -Understanding of requirements -Capability -Willingness to take over responsibility

During the third phase, the clarification phase, focus changes to the perceptions of knowledge and capability. The brand’s attitude towards how they work and their willingness to take over responsibility is also valued. The purchasing and the engineering interact with the engineering and

sales of the supplier brand by telephone, email, documents and face to face. This phase is very influential since it is the phase where the first intense interactions occur. The number of considered supplier brands is reduced to a few or even only one. The cumulated rating appears high and seems particularly important to the involved members, given that only three members are involved.

Phase:	Survey
Factors:	<ul style="list-style-type: none"> -Capability -Orderliness -Competence -Modernity -Reliability -Systematic -Serial quality

The fourth phase is the survey phase, which can vary in the order, and only includes one touchpoint, the visit to the supplier's facility. Depending on time pressures, its importance and the geographical distance, this phase can also be executed during the

delivery phase or after the foreplay phase. Although the cumulated importance of this phase is lower in comparison to the clarification phase, its relevance for the perception is decisive, as all buying centre members have the included touchpoint in mind and the single touchpoint of this phase leaves a narrow time frame to convey an impression. The visual appearance of the physical evidence is one of the main sources by which the capabilities and the valued modernity are perceived. Other valued factors include the orderliness, systematic, serial quality and reliability. While the sales, engineering and other staff value the competence, the focus of the buying centre is on capability. The main issue during this phase is that a large part of the brand's perception is transported by the facility and the infrastructure.

Phase:	Foreplay
Factors:	<ul style="list-style-type: none"> -Product quality/functionality -Competence -Openness -Price -Capability -Reliability -Speed

The next phase is the foreplay as it concerns the preparations for the main delivery. The first intermediate results are delivered and the supplier makes its first statement, which is examined for accurateness. During this phase the product quality

and functionality are the major topics. The competence is also a major factor during this phase and includes the know-how of procedures and the technological knowledge. The value of openness and the capabilities of the supplier brand are further topics of focus in this phase.

During this phase, the engineering interacts with its counterpart and the purchasing is in contact with the sales. An important touchpoint is the first perception of the physical product. The quality and functionality are perceived through the experienced performance.

Phase:	Delivery
Factors:	<ul style="list-style-type: none"> -Reliability -Adherence -Organisation performance -Product quality

During the delivery phase the first major contact with the product is accomplished. The perception of reliability is the main issue during this phase.

The adherence factor is a subtopic of reliability and is mainly perceived by the management and the quality management. Interrelated with

the reliability is perception of the capability of the organisation. Finally, yet as important, are the values of product quality and functionality. The sales, accurate delivery and the product itself are the main sources of perception during this phase.

Phase:	Proof of credit
Factors:	<ul style="list-style-type: none"> -Management (quality) -Reaction time -Product quality -Commitment -Solutions (long-term) -Logic -Willingness to solve problem

As in all relationships, there comes a phase of problems, where the credit towards the counterpart is put to the test. The factors that are valued during this phase are the capability of the management, the reaction time and the product quality. In addition,

the commitment, the solution orientation and the willingness to solve a problem are also valued attitude factors. Due to the high involvement of the quality management function, this phase includes the most influential touchpoint regarding the perception of quality management. During this proof of credit phase, the engineering is not involved given that the engineer did not mention any touchpoints related to this phase.

Phase:	Relationship
Factors:	<ul style="list-style-type: none"> -Willingness to improve -Strategic fit -Speed -Partnership -Competence

The next phase is the relationship phase, which includes five touchpoints. A main factor during this phase is an attitudinal factor, the perceived willingness to improve. The perceived partnership

and the strategic fit are valued aspects. The strategic fit is perceived through behaviour (during the negotiations of new contracts and technology) and market development (through newsletters and information through Google Alert). Apart from the attitude and the relationship aspects, the capability of speed and competence are valued. The management, the purchasing and the engineering are involved during this phase and interact with the sales and the engineering by telephone, email, documents and also face to face.

Phase:	Maturity
Factors:	<ul style="list-style-type: none"> -Business-like -Objectiveness

As certain business relationships need to be cancelled, a certain maturity is expected by the supplier brand. During this phase, a business-like

behaviour and objective attitude are valued. The maturity phase is left to the purchasing function and is settled with the sales function of the supplier brand by telephone and email.

Phase:	In mind
Factors:	<ul style="list-style-type: none"> -Competence -Capability -Co-operation

The process subsequently ends the way in which it started, namely with what is in the mind of the buying centre members. In this case the

engineering mentioned familiarity with the know-how, the capability and the perceived co-operation, which the engineering keeps in memory and may lead to future business.

To summarise, the clarification phase is the most influential; nevertheless, the survey and foreplay phases are also critical. The engineering and the purchasing function are mainly involved during this phase. It is also perceptible that the sales and engineering of the supplier brand are influential for the perceptions of the supplier brand. The focus on particular brand association factors changes throughout the business relationship. In the beginning, the focus is on the knowledge aspects but during subsequent steps capability is also considered. Attitude is also a valued aspect and becomes most influential during the end of the business relationship. Remarkable is the engineering's last touchpoint, the experience in mind, which points out the value of the familiarity with the brand's competence, capability and co-operation.

4.2.1.4 Conclusion to the business relationship characteristics of case 1

The buying centre member could think of only one touchpoint that pertained to the pre-contact phase. The supplier brand communication resonated in the mind of the engineering function with some strong and positive brand associations. A possible explanation for the single touchpoint in mind can be attributed to the company's interest in customer-specific designed components. Due to the specificity of the performance, it is assumed that these solutions are not frequently communicated through trade journals or scattered by direct mailings. However, the communication can be executed by presenting the technological competence and differentiated performances.

The process in this case continues with the evaluation phase, which focuses on the perception of capability. The most influential resource seems to be brand communication through the homepage. Besides the strategic fit and the price range, reliability of the supplier brand is perceived through the homepage. Furthermore, the buying centre members prefer to rely on the experience of other people or information in their own company database. During the clarification phase, the competence, accurateness and the perceived experience of the salesperson, engineering and receptionist are valued brand associations. During the survey and foreplay phases, both capability and competence are important brand association factors. During the foreplay phase, product quality and functionality are the main factors, and these continue to the delivery and proof of credit phases. The attitude associations evolve during the business relationship. The perception

starts with value of reliability, proceeds with the accurateness and the perceived willingness to take over responsibility and goes on with the perception of orderliness, systematic and reliability. The values of openness and reliability then follow. The process continues with the perceived commitment and the willingness to solve a problem and goes on with the value of the willingness to improve. At the end, during a possible termination of the business, a business-like attitude is valued. A business relationship can be discontinued for different reasons and is not always in favour of all business functions, as identified in this case. Therefore, business-like behaviour is recommended and could be helpful for ensuring the best possible precondition to reactivate the business in future and to leave a positive mental association. “...*The more professional the more it is possible that new business will be possible...*” (Purchasing “HP” Case 1, interview, 25 July, 2012)

For engineering the experiences related to the values of competence, capability and co-operation remain mental associations, which can lead to future business. The identified touchpoint “colleagues’ network” indicates that the experience of colleagues is also valued.

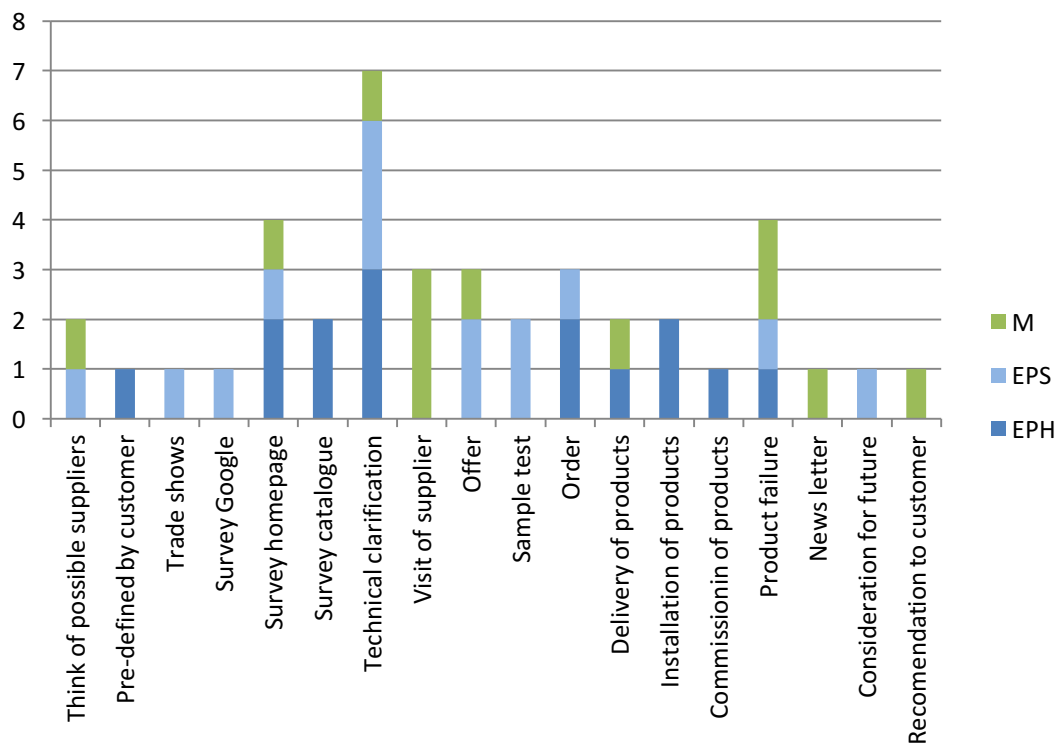
The business relationship process starts mainly with being influenced by direct brand communication and from the experiences of others. As soon as the relationship becomes interactive, the sales and engineering business functions of the supplier brand seem to become the main source of brand association, which, in this case, is perceived mainly by the purchasing and engineering function of the buying centre. The face-to-face communication and telephonic (telephone) and electronic (email) communications are the most used channels.

4.2.2 Case 2 - business relationship characteristics

As described in Section 3.4.3, the company in Case 2 mainly assembles control boxes, programmes the PLC and implements customer-specific systems. The system provider values product knowledge, clarity, reaction time and available solutions for project specific assignments (see Section 4.1.2.4). The buying centre looks for standard product solutions to build into their customer-specific systems. The evaluation and perception during the other business relationship phases are analysed by presenting the relevant touchpoints and the valued phase-specific brand association factors. The sources and channels used are presented in connection with the identified phases.

4.2.2.1 Influence of touchpoints

The 18 identified touchpoints illustrate, in comparison to Case 1, the less intense business relationship (see Figure 13) . Similar to Case 1, more than half (11 of 18) of the identified touchpoints are merely mentioned by one of the members. The overlap of the two engineering functions is is, interestingly, very low, which is believed to be due to the software engineer being mainly engaged in developing new solutions, while the hardware engineer’s focus is mainly in finding products that fit a specific requirement.



EPS: Engineering project leader -software / EPH: Engineering project leader -hardware / M: Management

Figure 13: Importance of touchpoints and involved business functions case 2

The touchpoint having the most influence occurs during the technical clarification. All three buying centre members are involved during this touchpoint; the two engineering functions rate the touchpoint as very important for the perception of the supplier. The next two relevant touchpoints are perception during the survey of the homepage and perception during product failure. The management is particularly concerned about product failure and one of the engineers rated the survey of the homepage as important. As with Case 1, the engineering seems to have a more distinct interaction with the supplier brand. In relation to the number of identified touchpoints, the management function in

Case 2 shows a higher involvement than Case 1, which is explained by the smaller company size of Case 2. Interestingly, only the management mentioned the visit from the supplier, which according to the management seemed to be an exceptional occasion since the supplier is merely called to solve special challenges. The channels used by engineering are mainly telephone and email for handling daily assignments.

Although the engineering does not have many overlapping touchpoints, they do agree about the high relevance of the technical clarification (see Table 66).

Table 66: Cross analysis of very important touchpoints case 2

Touchpoints	EPS	EPH	M
Technical clarification	X	X	
Visit of supplier			X

EPS: Engineering project leader -software / EPH: Engineering project leader -hardware / M: Management

The management sees the visit from the supplier as the most relevant touchpoint. Also during the visit from the supplier, the main topic is also clarification of technical issues. The difference is that the interaction is face to face and that the salesperson receives a problem definition in advance and a presentation of a solution is expected during the visit. It is therefore reasonable that the management rates the visit highly, as the face-to-face interaction offers much more perceivable facets. Although engineering may be assumed to take part during such presentations, at least occasionally, the engineering functions appeared to not have this touchpoint in mind.

Overall, the two business functions agree on the high importance of the perception during the technical clarification. However, some difference is seen in the second order rating (see Figure 13). The management sees the perception during product failure as important. The engineer with software focus rates the offer and the sample test as important and the engineer with hardware focus sees the perception through the homepage, the catalogue and the interaction during ordering and installation of the product as important. Corresponding to the low overlap of touchpoints between the engineering functions, the difference in rating seems to be due to the difference in the scope of duties.

Corresponding to Case 1, the identified touchpoints do not have a definite order of procedure, but are found to be grouped in particular phases depending on the underlying motivation and particular relationship activities.

4.2.2.2 Phases, channels, sources and involved business functions

In Case 2, eight phases of the business relationship are identified (see Table 67). The procedure starts with the supplier brand in mind and ends with the retrieved experience in mind. In Case 2 the survey phase is missing. This is believed to be due to the buying centre buying mainly standard products, which may not require an inspection of the supplier's facility. As defined, the individual phases include touchpoints that are caused through the same motivation or have a particular process characteristic.

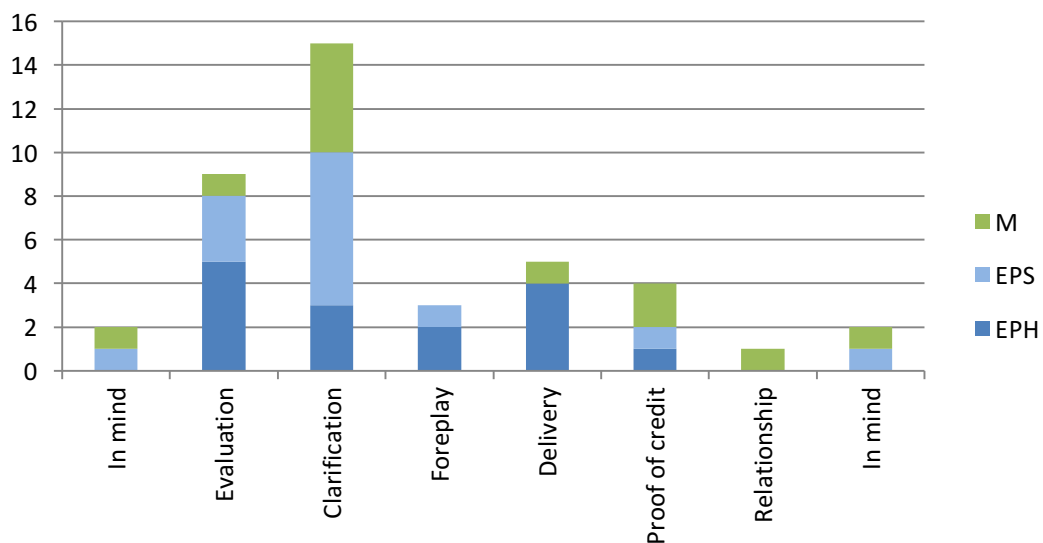
Table 67: Touchpoints and phases case 2

Touchpoints	Think of possible suppliers	Pre-defined by customer Trade shows Survey Google Survey homepage Survey catalogue	Technical clarification Visit of supplier Offer Sample test	Order	Delivery of products Installation of products Commissioning of products	Product failure	News letter	Consideration for future Recommendation to customer
Phases	In mind	Evaluation	Clarification	Foreplay	Delivery	Proof of credit	Relationship	In mind

In Case 2 the management and one of the engineering business functions mentioned to first consider the supplier brands in mind. The management stated to already knowing all relevant supplier brands (Management "M" Case 2, interview, 10 August, 2012). During the evaluation phase it can happen that their own customer pre-defines the possible suppliers to build the control box. Otherwise, a survey of the homepage and catalogues and occasionally a visit to a trade show were mentioned as touchpoints during the evaluation phase. As in Case 1, the following phase is the clarification phase, where technical requirements and price are clarified. In this case (Case 2) no visit of the supplier's facility was mentioned by any of the buying centre members. Therefore, the next phase is the foreplay phase, which is merely defined by the placement of the order. Next to the delivery of products, the delivery phase includes the installation and commissioning of the products, which are accomplished by one of the engineering business functions. The subsequent proof of credit phase includes the touchpoint of product failure. In this case the relationship phase is merely defined by the management mentioning the perception of newsletters. The last phase in this case is defined by the

buying centre considering the supplier brand for future business and even recommending favourable supplier brands to customers.

As in Case 1, the clarification phase seems to be the most effective phase (see Figure 14). The evaluation phase is the second in row, where also all of the buying centre members are involved. The engineering business function appears to be the most involved business function during this phase. Only the engineering business function is part of the foreplay phase and the management seems to be sensible during the proof of credit phase.



EPS: Engineering project leader -software / EPH: Engineering project leader -hardware / M: Management

Figure 14: Importance of phases and involved business functions case 2

Due to the buying centre members being experienced, the phases start by the known supplier brands (see Table 68). The influencing sources are comparable to Case 1, except that in this case the customer's customer can also be one of the sources. The clarification phase also focuses on the sales and the engineering business function of the supplier brand.

Table 68: Phases, sources and involved business functions case 2

Phase	In mind	Evaluation	Clarification	Foreplay	Delivery	Proof of credit	Relationship	In mind
Sources								
Sales			x	x		x		
Products		x	x		x			
Brand communication		x					x	
Engineering			x					
Colleagues/employees		x						
Staff		x						
Search algorithm		x						
Quality management						x		
Customer		x						
Experience	x							x
Business functions								
Engineering	x	x	x	x	x	x		x
Management	x	x	x		x	x	x	x

It is interesting to see that during the following phases, the influencing sources are reduced to the sales, the products, possibly quality management and the brand communication. The next and last phase in this case is defined by the experience in mind. The buying centre so far did not experience a termination of business, which they explain by having to be open for what the customer requires. In this case telephone and email are the main channels utilised while the face-to-face communication is an infrequent medium (see Table 69).

Table 69: Phases, sources and involved business functions case 2

Phase	In mind	Evaluation	Clarification	Foreplay	Delivery	Proof of credit	Relationship	In mind
Channels								
Email/telephone			x	x		x	x	
Documents		x	x		x	x		
Face to face		x	x					
Visual appearance		x			x			
Mind	x							x
Product performance					x			
Internet		x						
Catalogue		x						
Packaging					x			

The packaging and catalogue are newly identified channels for communication.

The business relationship in this Case 2 appears to not be as interactive as in Case 1. The sales business function is the main source, followed by the product and the brand communication. As in Case 1, the clarification phase seems to be the most influential phase. The evaluation phase is the second most influential in this case, which also comprises a large number of influential sources.

4.2.2.3 Phases and the main valued brand association factors

The brand association factors of each phase are listed regarding their relevance, starting with the most relevant. The management and one of the engineering functions explicitly mentioned their consideration of the supplier brand in mind, as the first step for evaluation. Therefore, the touchpoint is actually an integral part of the evaluation phase.

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

Phase:	In mind
Factors:	-Competence -Product functionality

The identified business relationship starts with the supplier brand in mind and ends with the experience in mind, which closes the loop. The

management member stated knowing all of the relevant supplier brands. The resonated experience in mind seems to focus on the familiarity with supplier brand competence and product functionality. An interesting aspect of this case is that the customer occasionally predefines which supplier needs to be considered for the project. This predefinition can be questioned if the defined supplier does not appear to be suitable; nonetheless, the request is most possibly followed. This predefinition on the one hand limits any choice and eliminates the evaluation phase. On the other hand, according to the engineering, the predefinition can help generate brand awareness and mediates reliability.

Phase:	Evaluation
Factors:	-Clarity -Simplicity -Structure -Detail information -Openness -Solution

The evaluation phase is the second most important phase in Case 2. As all three buying centre members mentioned the survey of the homepage and one of the engineering members even sees the

touchpoint as important, the survey of the homepage seems the most influential touchpoint during this phase. This corresponds to Case 1. The main valued factors are the perceived clarity, the simplicity of the product handling and the brand's communication

structure. A major aspect is the perception of detail information. One of the engineers even mentioned that when *“no detail information is available, the supplier brand is not considered”* (Engineering “EPH” Case 2, interview, 13 August, 2012). Interrelated with the need of detail information, the perceived openness is valued. In contrast to case 1, the buying centre does not consider relational aspects and the attitudinal brand association factors appear to have more influence than the capability. Apart from trade shows, there is no direct interaction between the potential supplier brand and the buying centre; similar to Case 1. At the trade shows, the products and staff act as the source. The main source however is the brand communication on the homepage and the search algorithm of Google, which influences the resulting list of links to possible suppliers. As explained, the customer occasionally defines the supplier brand and therefore acts as a source. Interestingly, one of the engineering preferred the catalogue as a channel to evaluate suitable solutions. The engineer explained that *“the use of a catalogue helps maintain a better overview compared to the homepage”* (Engineering “EPH” Case 2, interview, 13 August, 2012).

Phase:	Clarification
Factors:	<ul style="list-style-type: none"> -Understanding of requirements -Competence -Interest -Reaction time -Detail information -Availability -Clarity

The clarification phase, similar to Case 1, represents the most influential phase. This phase includes the technical clarification touchpoints; the visit of the supplier, the offer and the sample test. The technical clarification touchpoints are the most

influential interactions. The most influential factors during this phase are the understanding of requirements, the competence and the perceived interest. The reaction time is also valued, which is interrelated to the value of interest. Clarity and the delivery of detail information are again influential factors. In addition, the availability of a competent contact person is valued. The main sources are the salesperson, the engineer and the product during the sample test. As in Case 1, there is an emphasis on the capability and the knowledge.

Phase:	Foreplay
Factors:	<ul style="list-style-type: none"> -Availability -Speed

The foreplay phase in this case includes only the order of products. During this phase, the availability and the speed are the main valued

factors and both represent the capability aspect of the brand. Both engineers interact with the salesperson by email and telephone.

Phase:	Delivery
Factors:	-Simplicity -Clarity -Customer orientation -Product functionality

The delivery phase includes the delivery of products and the installation and commissioning of the products. The engineering business function is involved in the use of the products, which appears

to be the main source for the perceived associations. The engineering values the aspects of simplicity and clarity and recognises customer orientation and product functionality. The attitude towards customer orientation is recognised by the sequence and completeness of the delivery.

Phase:	Proof of credit
Factors:	-Openness -Solution orientation -Transparency -Detail information

The proof of credit phase includes the touchpoint product failure, which is one of the second most important touchpoints. The main valued factors are the perception of openness, solution orientation,

transparency and the delivery of detail information. Apart from the solution orientation, the other three factors are important to help understand the reason for the product failure and to eliminate a possible false use of the product. The supplier brand attitude and the information delivery influence the buying centre's possibility to learn and to develop better solutions. The main source is the salesperson and the quality management. The management prefers the quality management source, as quality management is believed to be more objective (Management "M" Case 2, interview, 10 August, 2012).

Phase:	Relationship
Factors:	-Solutions

In this case the relationship phase is a one-way interaction. Only the management talked about

receiving and seeing mailings through email and post. In this phase the management values the perception of solutions. Compared to Case 1, there is no need for improvement and partnership.

Phase:	In mind
Factors:	-Competence

The business relationship, in this case, ends with the experience in mind. One of the engineers and

the management particularly value the product's competence, which they will remember.

Summarised, the clarification phase is the most influential phase regarding the perception of the supplier brand for the buying centre. This phase also includes the most important touchpoint. Corresponding to Case 1, the salesperson is an important source during the

interaction. In this case, the engineering business function is involved during use of the products. The buying centre frequently values openness and the delivery of information. The lower interactivity and the smaller number of touchpoints and phases indicate a less intense business relationship. The buying centre values solutions and product knowledge, although its interest focuses on a supplier brand that merely provides products and is willing to offer detail information. The products need to be available and the information must be directly accessible. Nonetheless, the buying centre values competence and will consider competent supplier brands for future projects. Moreover, the influence of the attitudinal aspects increases toward the end of the business relationship. Corresponding to the nature of the project of the developed customer-specific systems, the buying centre values a supplier brand that is available when needed but is not interested in an intense business relationship.

4.2.2.4 Conclusion to business relationship characteristics of case 2

Due to the balanced number of identified touchpoints among the buying centre members, all three of the buying centre members have a differentiated perception of the supplier brand. In comparison to Case 1, the management is more directly involved, which is believed to be due to the management's technical experience and the small size of the company. While the small size requires less management tasks, the limited resources demand a more overlapping field of duties for each business function.

The buying centre possesses distinctive knowledge about the existing supplier brands in the market from where they search for possible solutions. The evaluation and the clarification phase appear to have the most influence on the perception of the buying centre. Although the management seems to be highly involved during the business relationship, the foreplay phase seems to mainly shape the engineering's perspective. Furthermore, the identified touchpoints are shaped by the scope of duties of the two engineering functions. This scope-specific influence is also noticed in Case 1, where the two purchasing functions also have some differing touchpoints in mind and partly have a different perspective about the relevance of the touchpoints. The head of purchasing is more influenced by interactive touchpoints. The operative purchasing focuses on the perception of what is communicated and delivered. This recurring finding indicates that the range of tasks has a certain influence on the perception of the supplier brand. The influence of the scope of duty seems to explain also the management's rating of the touchpoints in Case 2. In line with the management's high involvement in technical

aspects, the management rates a touchpoint that involves technical clarification as the most relevant. The second most relevant touchpoints are the survey of the homepage and the perception of the supplier brand during product failure.

As previously stated, the buying centre seems to not be interested in an intense business relationship. Competence and product functionality are the main resonating factors that are considered during the evaluation of a possible supplier brand. At the beginning of the business relationship, the buying centre values a supplier brand that offers an interface which enables an independent procedure to find a solution. If clarification is needed, the buying centre values understanding, competence, interest, reaction time, detail information, availability and clarity. During the foreplay phase, availability and speed are again the main factors that are valued. The delivery phase focuses on the product attributes and how it is delivered. In this case the engineering is regularly involved in the commissioning and installation of the product. In Case 1, the components are assembled into the products by the production department. As the engineering frequently uses the products, the engineering has a high product knowledge, which is also expected by the engineering or the sales of the supplier brand. Interestingly, this expectation appears to be frequently unfulfilled. During the proof of credit phase, the buying centre focuses on attitudinal factors and values a supplier brand that has an open attitude and delivers detail information. “...An objective factual operation is required...to be able to assess and delimit the source of the failure...” (Management “M” Case 2, interview, 10 August, 2012) As previously stated, the influence of additional factors appears to increase during the last phases.

Otherwise, the buying centre looks mainly for finished products and solutions to implement in their system, which explains the lower interaction and less intense relationship. The main influential sources are limited to the brand communication, the sales, documents and the products. The product itself is, in comparison to Case 1, more in the focus and thus appears to have a higher influence on the perception of the supplier brand. Furthermore, the availability of documents, which contain detail information, seems to be crucial in this case.

Although competence and understanding are valued—and the engineering values the personal relationship with the sales or the engineering of the supplier brand—the

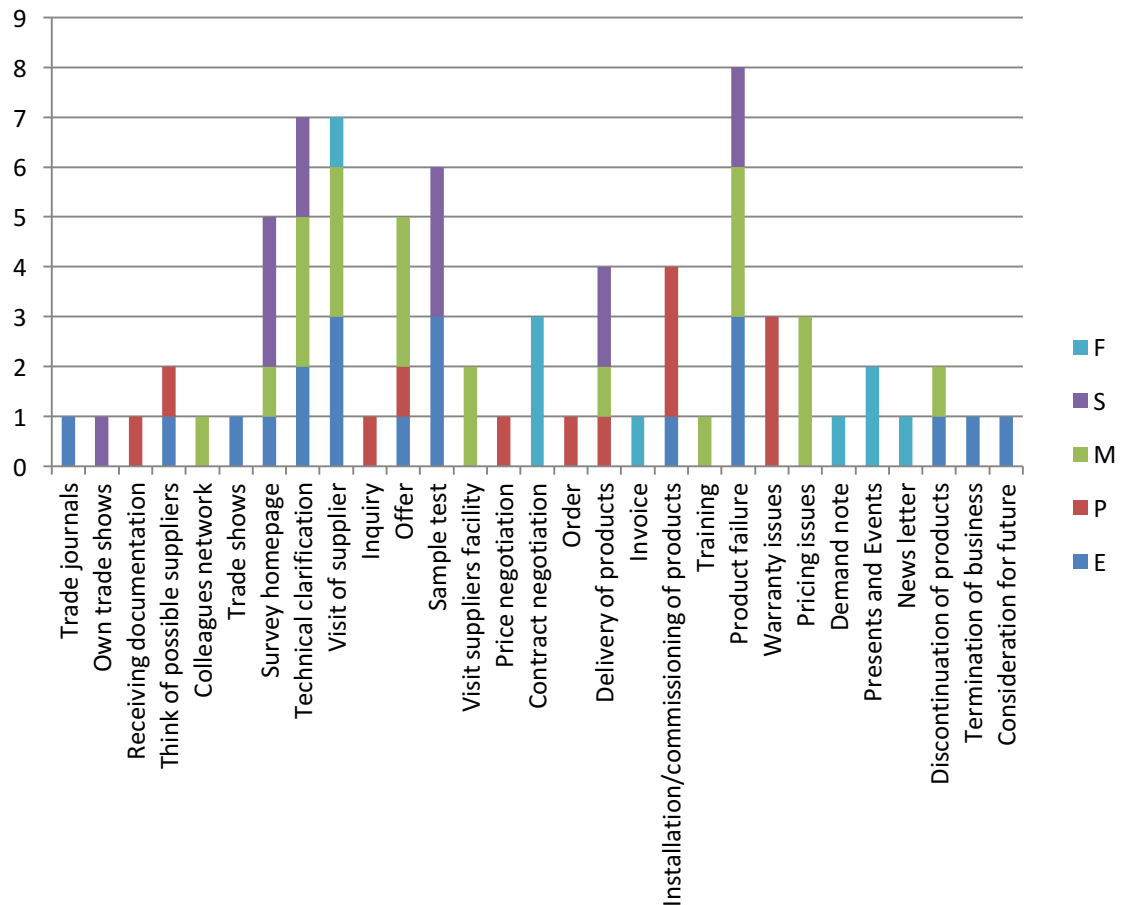
assurance of independence is appreciated, which is also reflected in the low emphasis on partnership.

4.2.3 Case 3 - business relationship characteristics

Similar to Case 2, Case 3 purchases mainly standard products. The standard products are assembled into a designed machine, which is sold under the company brand. This case stands out through the extraordinary compilation of the buying centre. As identified in Section 4.1.3.7, the buying centre values competence and the capability to present and accomplish solutions and a functional product. The valued attitude includes reliability, openness and customer orientation. As in Case 2, both the product and the delivery of detail information are valued. In Case 3, partnership is one of the main factors that the buying centre focuses on, unlike Case 2. This factor is also represented in the high number of identified touchpoints, which are analysed in the following section. The analysis proceeds by looking at the relevance and the valued brand association factors of the identified phases. In addition, the sources and the channels used are presented with regard to the identified phases.

4.2.3.1 Influence of touchpoints

As in Case 1, there are 29 touchpoints that appear to be in the minds of the buying centre members (see Figure 15). More than half of the identified touchpoints (19 of 29) were mentioned by the one buying centre member.



E: Engineering / P: Purchasing / M: Management / S: Sales / F: Finance

Figure 15: Importance of touchpoints and involved business functions case 3

This corresponds with the previous two cases and is believed to indicate the individual influence of the touchpoints, which is determined by the individual area of responsibility and the involvement. Moreover, the engineering's above average number of identified touchpoints also corresponds. The management business function mentioned more touchpoints than the purchasing function. This is caused by the dual business function (purchasing/production) of this buying centre member and the merely executive purchasing role.

In this case, the touchpoint with the most influence is the perception during product failure. The second most influential touchpoints are the technical clarification and the visit of the supplier. The third in row is the sample test. This touchpoint is merely in the mind of two buying centre members (the engineering and the sales function) and is rated as very important by both. The third set of relevant touchpoints is the survey of the homepage and the offer. The fourth most relevant touchpoints are the contract negotiation, warranty issues and pricing issues.

The engineering values face-to-face interaction for the technical clarification and sees product, the sample test and product failure as the most relevant touchpoints (see Table 70). The purchasing sees the installation/commissioning of the product and warranty issues as the most relevant touchpoints. The high rating of the product installation is due to the purchasing function's second role of being responsible for production. The management felt the need to rate a variety of touchpoints as very important. Two of the touchpoints concern price.

Table 70: Cross analysis of very important touchpoints case 3

Touchpoints	E	P	M	S	F
Survey homepage				X	
Technical clarification			X		
Visit of supplier	X		X		
Offer			X		
Sample test	X			X	
Contract negotiation					X
Installation/commissioning of products		X			
Product failure	X		X		
Warranty issues		X			
Pricing issues			X		

E: Engineering / P: Purchasing / M: Management / S: Sales / F: Finance

Corresponding to Case 2, the technical clarification and the visit of the supplier are both interactions that are concerned with the clarification of technical issues. As in Case 2, the management has extensive technical experience, which is assumed to influence the high perception during the technical clarification. The sales function rates the survey of the homepage and the sample test as very important. The sales function explained his interest by stating that *“the test result influences the keeping of the deadline and the functional performance regarding their own customer”* (Sales “S” Case 3, interview, 9 September, 2012). Moreover, the sales has a strong technical background and feels responsible for understanding the details of the machine and being able to explain it in front of the customer. Corresponding to the area of responsibility, the finance rates the contract negotiation as the most important touchpoint.

The involvement of the sales is related to the case-specific procedure, which is given through the status of the salesperson being part of the extended board and having a technical background. Additionally, the involvement of the finance function is driven mainly by the status of being one of the leading siblings of the family-owned company. It is assumed that the high involvement of the management is due to the company being

family owned and that the management has a high emphasis on the technical aspect. The high number of touchpoints rated as very important is noteworthy. It is also interesting that the purchasing sees the warranty issue as the most important touchpoint. Compared to the other cases, the buying centre is comprised of people who have overlapping areas of responsibility and perspectives. This results in individual interactions that are not typical of business functions. It is also apparent that the purchasing function did not mention the homepage as one of the sources.

Corresponding to the other two cases, the identified touchpoints can be categorised by the underlying motivation or towards the status of a relationship activity.

4.2.3.2 Phases, channels, sources and involved business functions

Based on the identified touchpoints, 11 phases are identified in Case 3 (see Table 71). Similar to Case 1, a pre-contact phase is identified, which summarises the perception of the brand communication and acquisition activities of the supplier brand. The small number of identified touchpoints during the pre-contact phase is noteworthy. While three touchpoints are identified in this case, in Case 1 only the engineer mentioned the perception of a supplier brand during his studies and in Case 2 the buying centre did not mention any touchpoint during this phase. This finding suggests that active brand communication measures do not have strong resonance in the minds of the buying centre.

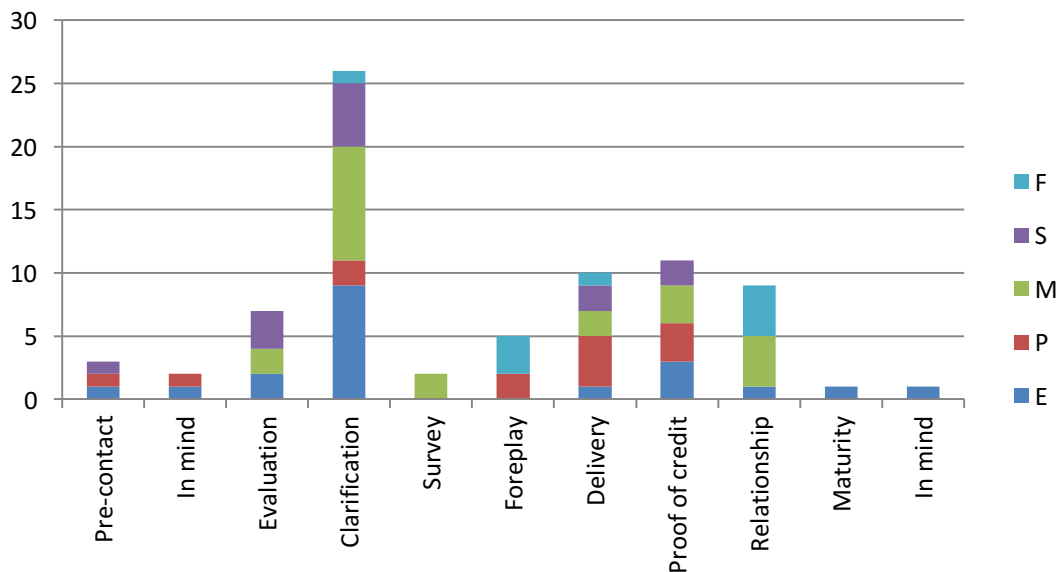
Table 71: Touchpoints and phases case 3

Phases	Touch-points
Pre-contact	Trade journals Own trade shows Receiving documentation
In mind	Think of possible suppliers
Evaluation	Colleague's network Trade shows Survey homepage
Clarification	Technical clarification Visit of supplier Inquiry Offer Sample test
Survey	Visit supplier's facility
Foreplay	Price negotiation Contract negotiation Order
Delivery	Delivery of products Invoice Installation/commissioning Training
Proof of credit	Product failure Warranty issues
Relationship	Pricing issues Demand note Gifts and events News letter Discontinuation of products
Maturity	Termination of business
In mind	Consideration for future

In this case, the business relationship starts with a richer pre-contact phase and, as in case 1, the buying centre mentioned the consideration of known supplier brands. The evaluation phase also includes consultation with the colleague's network, the survey of

the homepage and occasionally a visit to trade shows. The next and most influential phase is the clarification phase. In relation to Case 2, the survey of the supplier's facility is not a major event. Nevertheless, the management occasionally surveys the facilities of its suppliers. The compilation of the foreplay phase is more comparable to the findings in Case 1. The subsequent delivery phase, as in Case 2, also includes the installation and commissioning of the products. A new touchpoint is the perception of the invoice during this phase. As in the previous two cases, the next phase is the proof of credit phase, followed by the relationship phase, which appears to be much richer than in Case 2. As in Case 1, the buying centre has experienced a termination of business with a supplier brand. Furthermore, the analysis of the business relationship also ended with a buying centre member mentioning the consideration for future business.

As in Cases 1 and 2, the clarification phase appears to be the most influential phase (See Figure 16). The second most relevant phase is the proof of credit phase, followed closely by the delivery phase and the relationship phase. The relevance of the relationship phase seems to be more comparable with the perception in Case 1.



E: Engineering / P: Purchasing / M: Management / S: Sales / F: Finance

Figure 16: Importance of phases and involved business functions case 3

In addition, the pattern of the influencing sources appears to be more similar to Case 1 (see Table 72). The main influencing sources are the sales and the engineering business functions of the supplier brand, followed by the indirect perception through colleagues or employees. The influential sources are limited to the sales and the engineering during the

clarification phase and the sources become more people centric or business function centric throughout the business relationship.

Table 72: Phases, sources and involved business functions case 3

Phase	Pre-contact	In mind	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	In mind
Sources											
Sales	x			x	x	x	x	x	x	x	
Engineering				x			x	x	x		
Colleagues/employees			x				x	x	x		
Brand communication	x		x						x		
Products			x				x				
Finance							x		x		
Experience		x									x
Staff			x								
Physical evidence					x						
Quality management								x			
Business functions											
Engineering	x	x	x	x			x	x	x	x	x
Purchasing	x	x		x		x	x	x			
Management			x	x	x		x	x	x		
Sales	x		x	x			x	x			
Finance				x		x	x		x		

As with the sources, the identified channels are also similar to Case 1 (see Table 73). As disclosed in the other three cases, the engineering business function appears to be as much involved as the purchasing function. The communication appears to be via interactive media such as face to face, telephone and email.

Table 73: Phases and channels case 3

Phase	Pre-contact	In mind	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	In mind
Channels											
Face to face	x		x	x	x	x	x	x		x	
Email/telephone			x	x		x	x	x	x	x	
Documents	x		x	x			x	x	x	x	
Visual appearance			x		x		x	x			
Product performance							x	x			
Facsimile				x		x					
Internet			x								
Mind		x									x
Packaging							x				
Gifts									x		

Newly identified channels include the use of the facsimile, as well as perception of the brand through the receiving of gifts. Similar to Case 2, the buying centre also perceives brand communication through the packaging.

Although the buying centre purchases mainly standard products, the identified patterns of sources, the channels and the intense relationship appear to be comparable to Case 1. As with the other two cases, the clarification phase is the most influential. Furthermore, the buying centre appears to have a relatively high sensitivity during the proof of credit phase.

4.2.3.3 Phases and the main brand association factors

The following analysis presents the main brand association factors that are identified in each phase.

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

Phase:	Pre-contact
Factors:	-Solution -Competence

The pre-contact phase includes trade shows journals, mailings and contact with sales people that arise during the company's own trade show.

The main factor of interest is the perception of solutions that offer an added value; for example, reduced cost, simplify or increase speed. The second aspect is the perceived

technical competence. In addition to the two main factors, the attitude towards continuity, openness, fairness and respect, as well as the delivery of detail information, geographical proximity and simplicity are perceived as valued factors.

Phase:	In mind
Factors:	-Competence -Product functionality

Corresponding to Case 2, during the evaluation of suppliers, two members mentioned their consideration of the suppliers in mind. The management and the purchasing value competence and product functionality. Corresponding with the business case in Case 2, the customer can sometimes predefine the supplier brand. This applies to situations of customer-specific machine designs. However, the supplier brand can be questioned if the defined supplier does not appear to be suitable; nonetheless, the request is most possibly followed.

Phase:	Evaluation
Factors:	-Solution -Detail information -Openness -Speed -Structure

The evaluation phase includes consulting with the colleagues' network, visiting trade shows and surveying the homepage. The sales function is frequently involved during this phase. As during

the pre-contact phase, the perception of solutions is the leading factor. Similar to case two, the delivery of detail information is valued, which requires openness. During the survey of the homepage, structure and speed are valued factors. The management's statement that he likes to search for potential suppliers by using Google pictures, points out the influence of the search algorithms (Management "M" Case 3, interview, 9 September, 2012). As only the sales function mentioned the trade shows, the evaluation phase seems to be mainly a passive search process.

Phase:	Clarification
Factors:	-Competence -Responsiveness -Solution orientation -Understanding of requirements -Respect -Availability

All buying centre members are involved during the clarification phase. Competence is a frequently valued factor during this phase and comprises knowledge of the company's own limitations. Further, the attitude towards responsiveness,

solution orientation, respect and the capability towards understanding requirements and availability are valued factors during this phase. This phase is also the most important phase for perceiving the supplier brand. This is defined in that all members are involved and it was given a particularly high rating by the management and the engineering. In

particular, the visit from the supplier, the sample test and the touchpoint to clarify the technical issues are influential. The main two sources during this phase are the sales and the engineer business functions.

Phase:	Survey
Factors:	-Technological competence -Solution orientation -Reliability -Orderliness -Systematic

In this case, only the management mentioned the touchpoint “visiting the supplier’s facility”. During the survey phase the management perceives the technological competence and the attitude towards

solution orientation, orderliness, reliability and the systematic as important. Management rates this touchpoint as important, which is low compared to the rating in Case 1. Due to the few identified sources, the accomplished inspection does not seem to be as comprehensive.

Phase:	Foreplay
Factors:	-Competence -Flexibility -Reliability

The foreplay phase includes the touchpoints of price negotiation, contract negotiation and the order. Again, the perception of competence is very

influential. In addition, flexibility and reliability are influential factors during this phase. The main source, which is the interaction with the purchasing and the finance, is the sales. In this case the facsimile is a frequently used channel for communication.

Phase:	Delivery
Factors:	-Reliability -Solution orientation -Availability

The delivery phase includes the delivery of products, the installation and commissioning of the products, the training and receiving of the invoice.

The main identified factors are reliability, solution orientation and availability. Although the management is not directly involved in the training, this touchpoint and the perceived product competence resonate in the mind of the management. The management perceives competence indirectly through what the employees report. Similar to Case 2, the buying centre is involved in the installation and commissioning of the products and values solution orientation, product functionality and adherence. Furthermore, the reliability of the packaging is valued. Of note, in Case 2 the practicality and efficiency of the packaging is valued, while the reliability of the packaging is not considered to be a problem. The buying centre in Case 2 perceives the packaging as somewhat excessive and impractical.

Phase:	Proof of credit
Factors:	-Competence -Product quality -Solution orientation -Speed

In this phase, the perceived competence is again one of the main valued factors. The competence comprises product knowledge and knowledge about the limits of the product. Naturally, product

quality is a perceived brand association factor. Additionally, solution orientation and speed are valued brand association factors. As visualised in Figure 17, this phase is one of the second most influential phases. An additional value perceived by the purchasing is the willingness to take over responsibility. Nevertheless, the purchasing states that the supplier is not expected to inconsiderately shoulder the blame. The priority lies on finding the cause of the product failure in order to eliminate the issue for the future. The factors during this phase are perceived mainly through the sales and the engineering functions of the supplier. The supplier's quality management can also be involved and the management is informed mainly through the other business functions.

Phase:	Relationship
Factors:	-Transparency -Solution orientation -Co-operation -Consistency -Fairness

The relationship phase includes pricing issues, the receiving of demand notes, gifts and events, newsletters and the discontinuation of products. Surprisingly, the purchasing function did not

mention any touchpoint that corresponds to this phase. One possible explanation is that the purchasing function seems to merely have an executive function and primarily takes care of the orders. During this phase the attitude towards transparency, solution orientation, co-operation, consistency and fairness are the main valued factors. Transparency is influenced mainly by the behaviour during pricing issues and the discontinuation of products. In this case the sources contributing to the perception of the supplier brand include the sales and the engineer, general brand communication and even the finance function of the supplier.

Phase:	Maturity
Factors:	-Business-like -Relationship orientation

As in all cases, the maturity phase incorporates only one touchpoint, the termination of the business. In this case only the engineer mentioned

this kind of occasion. As in Case 1, a business-like behaviour is valued. The engineer also values relationship orientation because even though the business relationship may be terminated for new products, spare parts are occasionally needed. The engineer did mention that future business is not completely precluded. The main source during this phase is the salesperson. The salesperson is of course challenged to act according to a

long-term perspective, which possibly does not completely correspond with the nature of the sales function, which is measured by the accomplished turnover (Keller & Webster, 2004).

Phase:	In mind
Factors:	-Competence -Supplier performance

One of the buying centre members mentioned that the experience of the business relationship resides in the mind and that the supplier could be considered for future business. In Cases 1 through 3, the engineering business function mentioned the value of experience. It is assumed that this is interrelated to the fact that the engineer is generally assigned to find a technical solution and therefore is happy to know who can help. In this case the engineer values mostly the perceived product knowledge and general performance of the supplier.

As in case one and two, the clarification phase is the most important phase contributing to the perception of the supplier brand. During this phase the contact for technical clarification and the visit from the supplier seem to be the most influential touchpoints. During the proof of credit phase, the most influential touchpoint is the contact during product failure. As in the other cases, the sales and the engineer are the main influencing sources during the process. It must also be considered that as the finance function is part of the buying centre, the finance personnel of the supplier brand is also one of the influencing sources. Further, the management seems to perceive many aspects indirectly through reports from employees and colleagues. Although the company purchases mainly standard products, the co-operation is perceived as valued. This is interrelated to how the company sells their machine solutions. Unlike Case 2, the company in case 3 mainly sells machines under their own brand. Their added value therefore includes the performance of the standard products. The company in Case 2 is a solution provider that designs a solution with standard products.

4.2.3.4 Conclusion to business relationship characteristics of case 3

An interesting and also influential aspect in this case is the variety in the composition of the buying centre. The fact that the company is owned and managed by a family seems also to influence the perception of the management.

Similar to Case 2, the management has many touchpoints in mind; even more than the purchasing and not much less than the engineering function. However, the management

perceives many aspects indirectly and is not as directly involved as the management in Case 2. The management is, as in Case 1, more focused on management subjects. Nevertheless, the management has a diversified interest and picture of the brand—and therefore comprehensive perception—which is assumed to result from the personal connection with the company and history within the company.

The involvement of the sales and the finance function is explained by the salesperson's history in the company and that the finance function is one of the siblings leading the company. This leads to the identification of extraordinary touchpoints, which arise from the perception during their own exhibitions and from the interaction with the finance department of the supplier brand.

The perception of solutions is a leading factor during the start of the business relationship. Interrelating, valued factors are the attitude of openness and the rapid delivery of information. Competence is valued at the beginning, but becomes even more relevant during the interactive phases including the clarification phase, the survey, the foreplay and the proof of credit phases. During the first interaction, the attitude towards responsiveness, respect and the capability to understand the requirements influence the image of the brand. During the foreplay phase flexibility, reliability and product functionality are the main factors valued. During the delivery phase reliability, availability and the solution orientation are valued factors. The solution orientation remains a main factor during the proof of credit and relationship phases. In this case the focus towards attitudinal factors increases at the end of the analysed business relationship.

As noted for Cases 1 and 2, the clarification phase is the most influencing phase. The product failure touchpoint is also very influential in Cases 2 and 3. In comparison, the survey is the most influential touchpoint in Case 1. The identified similarities of Cases 2 and 3 and the difference to Case 1 seems to indicate a pattern as the purchasing characteristics match and differ correspondingly.

Apart from the characteristics of the purchase, the characteristics of the business context have an influence on the relationship phase. Contrary to Case 2, the buying centre in Case 3 has a stronger emphasis on co-operation, which is explained by how the company presents itself in the market. In Case 3, the added value represents the whole machine, which incorporates the standard products. The sales function justifies his interest in the

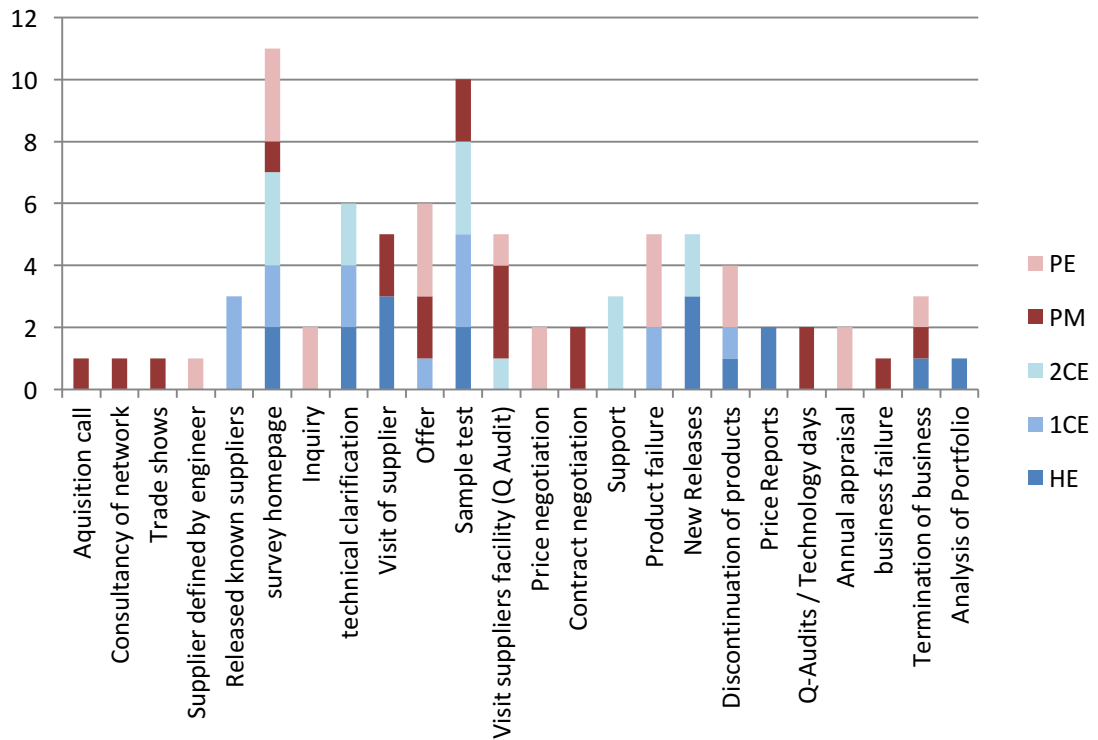
suppliers by stating the need to assume responsibility for their own customers (Sales “S” Case 3, interview, 9 September, 2012). The engineering function is concerned with the supplier’s interest in “smaller” customers (Engineering “E” Case 3, interview, 9 September, 2012). In Case 2 the added value is the design of the control system and the programming. The standard products are used to accomplish the system, but do not represent an integrated element of their value creation. The standard products are an important part of their performance; nevertheless, in relation to the customer the responsibility can possibly be shifted.

4.2.4 Case 4 - business relationship characteristics

The company in Case 4 purchases standard components such as resistors and microchips, as well as semi-finished goods such as touchscreens, which are integrated into the final product. In comparison to the other cases, Case 4 represents a much larger company with a higher degree of organisation and distribution of tasks. The main valued factors are competence, solutions, capabilities, reliability and reaction time. The attitudes concerning openness, customer orientation, continuity and clarity are particularly valued. Although the buying centre in this case only consists of two business functions, the number of identified touchpoints is almost as high as in Cases 1 and 3, which have a high variety of business functions. The high number is influenced by the separation of purchasing into mechanics and electronics, and that one of the engineers has a leading role. The business relationship characteristics of these two heterogenic business functions are studied in the following section by looking at the perceived relevance and valued factors during the identified phases. The sources and the channels used are also presented regarding the identified phases.

4.2.4.1 Influence of touchpoints

In this case, 24 touchpoints appeared to be in the mind of the buying centre members (see Figure 17). Again, more than half (14 of 24) of the identified touchpoints are merely mentioned by one of the buying centre members.



HE: Head engineering / 1CE /2CE: Component engineer 1 and 2 / PE / PM: Purchasing electronics and mechanics

Figure 17: Importance of touchpoints and involved business functions case 4

In this case the purchasing function has more touchpoints in mind than the engineering. The touchpoint with the most influence is the survey of the homepage. The influence of the survey of the homepage is high in the other cases as well. Interestingly, the most influential touchpoint is not an interactive touchpoint; neither is the second most influential, the sample test. All of the participants mentioned the survey of the homepage, which is rated as very important by one purchasing and one engineer, and rated as important by the other two engineers. Four of the buying centre members mentioned the touchpoint “sample test”. This touchpoint is seen as very important by two members and important by the other two members. Similar to the other cases, the technical clarification is an influential touchpoint. Of note, only the engineering mentions this touchpoint and rates the touchpoint as important.

The purchasing members mentioned 18 touchpoints in total, whereby 13 were only mentioned by one. In comparison, the two purchasing functions in Case 1 have a higher overlap. One explanation for the low overlap in this case is the specialisation of the two purchasing functions, as one is mainly in charge of mechanics and the other is responsible for electronics. The electronics purchasing function is more influenced by the homepage and defines the discontinuation of products as an important touchpoint. The purchasing

of mechanics only mentioned the survey of the homepage as one touchpoint and did not mention the discontinuation of products. This seems reasonable given that the main mechanical components are specifically produced plastic parts. Specialisation of the purchasing functions therefore seems to influence the perspectives. On the other hand, the overlap of the touchpoints of the three engineering members is relatively low. One of the engineers has a leading role, but they do not have a separation concerning the technical area. Nonetheless, they seem to be engaged in different topics. One of the component engineers is engaged mainly with printing devices and the other component engineer is mainly involved with touchscreens. Furthermore, the identified touchpoints—such as the portfolio analysis, the price reports and the termination of business—demonstrate the strategic interest of the head of engineering in his leading role.

The mechanical purchasing function sees the visit of the supplier facility as the most influential touchpoint (see Table 74). This is explainable in that the mechanical purchaser mainly places orders to manufacturing service companies, which produce the mechanical parts based on the customer’s specification. The interest in the supplier’s facility corresponds with case 1, which generally purchase customer-specific components. The electronic purchasing function focuses on price/performance and the perceived behaviour during a product failure.

Table 74: Cross analysis of very important touchpoints case 4

Touchpoints	HE	CE1	CE2	PM	PE
Released known suppliers		X			
Survey homepage			X		
Visit of supplier	X				
Offer					X
Visit of suppliers facility (Q-Audit)				X	
Sample test		X	X		
Support			X		
Product failure					X
New releases	X				

HE: Head engineering / 1CE /2CE: Component engineer 1 and 2 / PE / PM: Purchasing electronics and mechanics

Both component engineers agree on the importance of the sample test; there is otherwise no overlap. One component engineer values certainty and therefore appreciates being able to choose from a list of released known suppliers. The other component engineer sees the self-contained survey of the homepage as very influential. The head of engineering values the face-to-face interaction during the visit of the supplier and sees the approach during new releases as very important for the perception of a supplier brand. The identified

pattern discloses that the definition of the most influential touchpoints is highly affected by the actual tasks of the buying centre members.

Based on the rating and the identified touchpoints in the minds of the buying centre members, the buying centre seems to be influenced mainly by two touchpoints. Both touchpoints are characterised as a one-way communication, which can be explained by the more structured procedure of a larger company. The identified difference between the two purchasing functions discloses the influence of the individual tasks, which is also recognised in Cases 1 and 2.

Corresponding to the other three cases, the identified touchpoints do not have a definite order of procedure, but are found to be grouped into particular phases depending on the underlying motivation and particular relationship activities.

4.2.4.2 Phases, channels, sources and involved business functions

In this case, 11 supplier-customer relationship phases are identified (see Table 75). As in Cases 1 and 3, a pre-contact phase is identified. However, as in case 1, only one touchpoint is identified. In this case none of the buying centre members mentioned any delivery touchpoint, which is due to the buying centre members not being directly involved during this phase. A newly discovered phase is the observation phase where the head of engineering follows prior supplier brands.

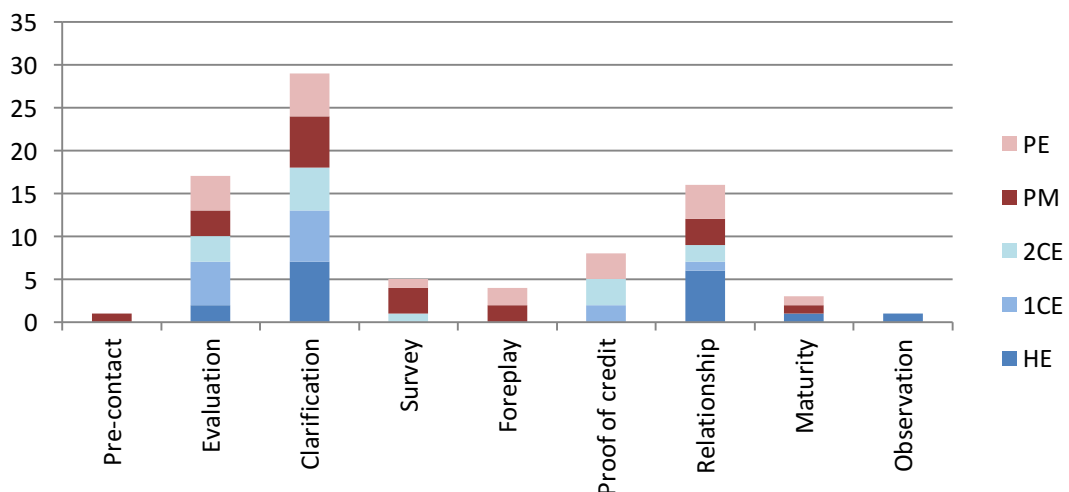
Table 75: Touchpoints and phases case 4

Phases	Touch-points
Pre-contact	Acquisition call
Evaluation	Consultancy of network Trade shows Supplier defined by engineer Released known suppliers Survey homepage
Clarification	Inquiry Technical clarification Visit of supplier Offer Sample test
Survey	Visit suppliers facility (Q Audit)
Foreplay	Price negotiation Contract negotiation
Proof of credit	Support Product failure
Relationship	New releases Discontinuation of products Price reports Q-Audits / Technology days Annual appraisal Business failure
Maturity	Termination of business
Observation	Analysis of Portfolio

The evaluation phase, which follows the pre-contact phase, is the second most influential phase. Apart from consulting the network, the survey of the homepage and the occasional

visit to a trade show, the supplier brand is perceived through an official list of released suppliers and the purchasing partly receives a target supplier from the engineering. The included touchpoints of the following clarification phase largely correspond to the identified touchpoints of the previous three cases. Similar to Cases 1 and 3, a survey of the facilities of the supplier brand is accomplished and in the foreplay phase some negotiations are accomplished. A new touchpoint during the proof of credit phase is the requested support for information concerning regulations. After the intense relationship phase, some of the buying centre members described the experience during a termination of business. The newly identified observation phase results from the engineering actively following previous suppliers.

As in all the other cases, the clarification phase seems to be the most influential phase (see Figure 18). The second influential phase is the evaluation phase, closely followed by the relationship phase. The relative relevance of the evaluation and the clarification phases is mostly comparable to Case 2.



HE: Head engineering / 1CE / 2CE: Component engineer 1 and 2 / PE / PM: Purchasing electronics and mechanics

Figure 18: Importance of phases and involved business functions case 4

As in Case 2, the buying centre develops a large part of their opinion during the evaluation of possible suppliers. Nonetheless, the explanation for this relation is different. In Case 2, the relevance seems to be explained by the characteristics of the value generation as a solution provider. In this case, the relevance is influenced mainly by the evaluation approach of a larger organisation, which is believed to have a higher emphasis on analysis. The relevance of the relationship phase matches particularly to Case 1. This similarity also has different reasons. In Case 1 the relationship appears to be very

influential as mostly customer-specific components are purchased. However, in this case the explanation is in the motivation to optimise the efficiency of the business process, which needs resources that a larger organisation is willing and able to invest. The following Table 76 presents the sources and the involved business functions throughout the phases.

Table 76: Phases, sources and involved business functions case 4

Phase	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Proof of credit	Relationship	Maturity	Observation
Sources									
Sales	x		x	x	x	x	x	x	
Engineering			x			x	x		
Colleagues/employees		x	x				x		
Staff		x		x			x		
Physical evidence				x			x		
Brand communication		x							x
Products		x							
Agency					x				
Organisation							x		
Network (private, business)		x							
Organisation				x					
Business functions									
Engineering		x	x	x		x	x	x	x
Purchasing	x	x	x	x	x	x	x	x	

Again, the sales and engineering business functions of the supplier brand are the main influencing sources. During the evaluation phase the brand communication, the products and what independent sources have to say influence the perceptions of the buying centre. Similar to the other cases, the sources are more limited to people during the next phases. As in case 3, the variety of sources increase again during the relationship phase.

Similar to Cases 1 and 3, the main channels of communication are face to face, email and telephone (see Table 77)

Table 77: Phases and channels case 4

Phase	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Proof of credit	Relationship	Maturity	Observation
Channels									
Email/telephone	x	x	x		x	x	x	x	
Face to face		x	x	x	x		x	x	
Documents		x	x	x	x		x		
Visual appearance		x		x			x		
Internet		x							x
ERP System		x							

Documents are also a frequently used channel for communication. All of the channels are used during the evaluation phase.

4.2.4.3 Phases and the main valued brand association factors

During each of the 11 phases some main brand association factors are identified, which are listed, top-down towards the identified relevance based on the identified frequency.

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

Phase:	Pre-contact
Factors:	-Performance

The pre-contact phase includes only one touchpoint, the acquisition call from the sales. Only the mechanical purchasing member mentioned a touchpoint during this phase. The main factor perceived by purchasing is performance; other factors perceived include technical knowledge and the ability to understand the application, flexibility, speed and the ability to communicate. The attitudes of clarity, responsiveness and respect are factors that are valued during the telephone call.

Phase:	Evaluation
Factors:	-Clarity -Solutions -Openness -Reliability -Detail information -Competence

During the evaluation phase, the electronic purchasing mentioned that occasionally the engineering would predefine the supplier. This pre-selection, which is normally followed, generates the association of technical capability. As in Cases 2 and 3, the availability of detail information is valued, as are the solutions and competence. The attitude factor is about clarity, openness and reliability. Interestingly, the identification of the extended network (business and private) is a possible source. In Cases 1 and 3, one of the buying centre

members mentioned the colleagues' networks. In this case the mechanical purchasing mentioned their own network and explicitly mentioned the private network as a possible source. A further interesting aspect is the dependence between engineering and purchasing. On the one hand the engineering can pre-define the supplier and on the other hand the engineering orients themselves with the released list of suppliers, which is mainly defined by the purchasing.

Phase:	Clarification
Factors:	<ul style="list-style-type: none"> -Competence -Price/performance -Product functionality -Reaction time -Customer orientation -Flexibility -Interest -Openness -Understanding of requirements

Competence, price/performance and product functionality are the most frequently identified factors during the clarification phase. Further, reaction time and ability to understand the requirements are valued factors. The valued attitudes include customer orientated, flexible,

being interested and open. The main communication with the supplier is accomplished by the purchasing department, while the engineering receives the annotated offer through the purchasing. Otherwise, the sales and the engineer of the supplier are the main sources.

Phase:	Survey
Factors:	<ul style="list-style-type: none"> -Reliability -Orderliness -Openness -Competence

Similar to Cases 1 and 3, the survey phase includes one touchpoint, that being the visit of the suppliers facility. During this phase the buying centre values

reliability, orderliness, openness and competence. During this audit the buying centre has contact with internal staff members. This phase seems to be particularly relevant for the mechanical purchasing function. The purchasing function appreciates the many possible sources and channels to develop a picture, which a supplier audit discloses.

Phase:	Foreplay
Factors:	<ul style="list-style-type: none"> -Continuity -Transparency -Decision making power -Willingness to negotiate

The foreplay phase includes the price negotiation and contract negotiation. These touchpoints are exclusively mentioned by the two purchasing

functions. During this phase the purchasing function values mainly attitude aspects, such as continuity, transparency and the willingness to negotiate. Furthermore, the salesperson has the ability to make decisions. The willingness to negotiate describes the request to negotiate with a supplier, which is willing to make concessions.

Phase:	Proof of credit
Factors:	<ul style="list-style-type: none"> -Honesty -Understanding of issue -Competence -Solution orientation -Openness -Reaction time

The proof of credit phase includes the touchpoint support and the contact during product failure. The support touchpoint represents the interaction during requests for product information. Honesty is

one of the most valued factors. In addition, the attitude towards solution orientation and openness are valued factors. Competence and the ability to understand the issue and the reaction time are influential aspects. The engineer and the sales function are the main sources during this phase and are perceived mainly through the telephone and email.

Phase:	Relationship
Factors:	<ul style="list-style-type: none"> -Customer orientation -Openness -Partnership -Continuity -Solutions -Willingness to learn -Ability to improve

During the relationship phase, the valued factors are particularly characterised by attitude aspects such as the customer orientation, openness, partnership, continuity and the willingness to learn.

The ability to offer solutions and the ability to improve are also valued factors. Besides the sales and the engineer, the supplier's staff, the setup organisation and the physical evidence serve as sources. The relationship phase appears similar to the relationship phase identified in Case 1, since the focus is on working together by improving and valuing innovation.

Phase:	Maturity
Factors:	<ul style="list-style-type: none"> -Business like -Understanding -Honesty -Relationship orientation

During this phase, a business-like behaviour is valued and, as in Case 3, a relationship orientation is valued. Corresponding to Case 3, the purchasing

is aware that although the business is terminated, the business relationship needs to be continued for a certain period of time; for example, it may be necessary to purchase minimum volumes of spare parts to ensure the availability. Besides these two factors, a certain amount of understanding and honesty are valued. As in Cases 1 and 3, a buying centre member states that a termination represents the current situation; nevertheless, it does not exclude a possible future business relationship.

Phase:	Observation
Factors:	<ul style="list-style-type: none"> -Fit of strategy -Solutions

The head of engineering mentioned the active observation of past suppliers as the last touchpoint.

During the observation phase, the engineering perceives the fit of strategy and the presented solutions by following the brand communication through the internet. Concerning the statement of the engineer, this observation may lead to a future business opportunity (Engineering "HE" Case 4, interview, 18 December, 2012).

As in the other three cases, the clarification phase is the most important phase for perception of the supplier brand, followed by the evaluation and the relationship phase, which is equal to Cases 2 and 3. During the clarification phase, the most influential touchpoint seems to be the sample test, which is also the second important touchpoint throughout the business relationship. During the evaluation phase, the survey of the homepage is the most influential touchpoint and is the most important touchpoint throughout the business relationship. As in the other three cases, the main sources are the sales and the engineer. Although the buying centre is purchasing mainly standard components, an intense relationship is valued. On the one hand this is influenced by the mechanical purchasing functions view, which looks for service manufacturers. On the other hand the marketed added value represents a complete handling solution, which is sold under the company's own brand. The buying centre seems to have a relatively high emphasis on attitudinal factors throughout the business relationship.

4.2.4.4 Conclusion to business relationship characteristics of case 4

The perspectives of the buying centre members are highly influenced by the range of their duties. In this case, their range of duties is influenced by the structured and specialised organisation of the larger company. In this case the purchasing has more touchpoints in mind than the engineering. This is defined by the organisation, which places the purchasing function as the main communication channel with the suppliers.

The relevance of the clarification phase is reinforced by the findings in this case. The relevance of the evaluation phase is similar to Case 2; however, the cause is believed to be different. The relevance of the evaluation phase is enforced by the canalised communication with the supplier. It is assumed that a larger organisation invests more time in the analysis of potential suppliers. This assumption is supported by the characteristics of the most important touchpoints, which are both non-interactive. In this case the survey of the homepage is the most influential touchpoint, which demonstrates the relevance of the homepage as an information source.

The findings show that, in this case, the attitude of the supplier brand seems to have an extraordinary relevance. During the evaluation phase the clarity, openness and reliability are the most influential factors. During the clarification phase, competence is the leading factor, followed by price/performance and product functionality. The most valued factors

of attitude are customer orientation, flexibility, interest and, again, openness. During the survey, the main factors are attitudinal factors that include the perceived reliability, orderliness and openness. During the foreplay phase, the attitudes towards transparency and willingness to negotiate are valued. In the following proof of credit phase, the leading factor is honesty. Further attitude factors are the solution orientation and the openness. Favourable attitude factors during the relationship phase are the customer orientation, openness, partnership, continuity and the willingness to learn. At the end of the business relationship, business-like behaviour, understanding, honesty and a relationship orientation are valued. Interestingly, some of the suppliers are observed by the engineering even after the termination. The continued interest in openness is evident.

The emphasis on partnership and some of the valued characteristics are similar to the findings in Cases 1 and 3. However, the cause in this respect is also different. The identified touchpoints indicate that interest in the partnership is influenced by the ability and interest to invest in optimising the efficiency of the processes. Furthermore, the buying centre seems to regularly struggle to enforce their requirements since their volume contribution is relatively low; many of the suppliers represent even larger companies. Although the buying centre values partnership and many attitudinal factors have been identified, hardly any relational aspects have been identified. A possible reason for this might be that larger organisations have more structured communication and greater anonymity, which offers less opportunity to develop individual relationships.

The relevance of the sales and the engineering as the main sources are again reinforced by the findings of Case 4. A further repetitive source during the evaluation phase is the consideration of their colleagues' network to find potential suppliers.

The analysis of this last case uncovers some recurring patterns. Furthermore, similar findings seem to have different causes. The aim of the following section is to study the identified factors from a holistic perspective through a cross analysis of the four cases.

4.2.5 Cross analysis – touching points – phases – brand association factors

The following cross analysis starts by comparing the most influential touching points and the different sources and channels throughout the cases, to identify influential business relationship phases (see Figure 10 “3. business relationship phases”), the influential touching points (see Figure 10 “blue arrows”) and the influential sources (see Figure 10

“network, cooperate brand communication, employees, etc.”) out of a holistic perspective. The next section also considers the cumulative results of Case 1 to 4 and aims to disclose the main brand association factors of each identified phase out of a holistic perspective.

4.2.5.1 Cross analysis of touchpoints, sources and channels

The number of identified touchpoints per case varies between 18 and 29. The low number in Case 2 results from the type of business and the contribution offered by the added value. As the sold added value does not directly include the used standard products, the interaction appears to be lower, which is believed to be interrelated with the lower assumption of responsibility.

A large conformance is found in the high influence of the survey of the homepage and the technical clarification (see Table 78). The survey of the homepage appears to be the most influential touchpoint, since even in case 3 it reaches the fourth position.

Table 78: Cross analysis of touchpoints

Touchpoints	Case 1	Case 2	Case 3	Case 4
Number of identified touchpoints	29	18	29	24
Top influential touchpoints (1-3)				
Survey homepage	3rd	2nd		1st
Technical clarification		1st	2nd	3rd
Visit of supplier		3rd	2nd	
Visit suppliers facility	1st			
Offer		3rd		3rd
Sample test			3rd	2nd
Order		3rd		
Price negotiation	2nd			
Delivery of 0 series	3rd			
Quality issues	3rd			
Product failure		2nd	1st	
Modifications	3rd			

The approach used to identify the most influential touchpoints, considered the number of buying centre members having the touchpoint in mind and the importance the buying centre members allotted to the occasion, which then determined the highly influential touchpoints. An influential touchpoint is found to be product failure. Mainly the management and the engineering see this touchpoint as being highly shaping. The visit of the supplier and the sample test also seem to be influential touchpoints. The overlap in the influential touchpoints is relatively high among Cases 2, 3 and 4, which mainly purchase standard deliveries. An overlap with Case 1 is found in the survey of the

homepage. Furthermore, the touchpoint of quality issues is comparable with the touchpoint of product failure. In both cases the functionality does not fit with the requirements.

In total, the survey of the homepage and the technical clarification and functionality are very influential. The composition of the influential touchpoints is interrelated with the type of (product, component) purchase.

In total 18 sources are identified (see Table 79). The sales and the engineering business functions are the most frequent sources for perception in all four cases. Colleagues and employees are also influential sources, which are approached during the evaluation phase to identify potential supplier brands.

Table 79: Cross analysis of sources in relation to phases

Phases	Total	Pre-contact	Evaluation	Clarification	Survey	Foreplay	Delivery	Proof of credit	Relationship	Maturity	Observation
Sources											
Sales	25	2		4	3	4	2	4	3	3	
Engineering	13			4	1	1	1	3	3		
Colleagues/employees	11		4	1			2	1	3		
Products	10		4	1		1	3	1			
Brand communication	9	2	4						2		1
Staff	7		4		2				1		
Physical evidence	4				3				1		
Organisation	3				1			1	1		
Search algorithm	2		1						1		
Quality management	2							2			
Finance	2						1		1		
Network (private, business)	1		1								
Professor	1	1									
Reception	1			1							
Supplier information	1		1								
Customer	1		1								
Accuracy of delivery	1						1				
Agency	1					1					

Value: Identified frequency throughout all cases (1-4)

At the beginning of the process (pre-contact & evaluation) it is apparent that the buying centre perceives mainly brand communication, word-of-mouth sources, the staff, the sales and the product. Except for the staff and the sales source, information is therefore perceived through one-way communication. Communication during the next phases

becomes more interactive and more personalised. The buying centre starts to interact with different business functions working for the supplier brand.

Concerning the marketing performance (see Table 80), brand communication and the product represent the most influential sources. The physical evidence and the organisation are merely relevant during the visit of the supplier’s facility. The influence of indirect opinion formers—for example, the customer’s customer, the buying centre’s network (internal or external) or the professor of a university—is interesting.

Table 80: Cross analysis of sources

Sources		Case 1	Case 2	Case 3	Case 4
People Behaviour	Sales	x	x	x	x
	Engineer	x	x	x	x
	Staff	x		x	x
	Quality management		x	x	
	Reception	x			
	Finance			x	
Marketing Performance	Brand communication	x	x	x	x
	Products	x	x	x	x
	Physical evidence	x		x	x
	Organisation	x			x
	Accuracy of delivery	x			
Opinion formers	Customer’s customer		x		
	Network (private, business)				x
	Agency				x
	Professor	x			
External data handling	Supplier information (database)	x			
	Search algorithm	x	x		
Customer Opinion	Employees/colleagues	x	x	x	x
	Experience	x	x	x	

It is worth considering that a customer’s organisation possibly has an internal database, which is consulted to evaluate potential suppliers. Furthermore, the search algorithm of the search platform determines the search results and therefore also the possibility to be considered during the evaluation phase. In addition to the buying centre members’ own experiences, the opinions of employees/colleagues are considered during the business relationship.

In total 14 channels are identified (see Table 81). The most frequently used channels are the telephone, email and face-to-face communication. Concerning the written “hardcopy” type of channels, descriptive documentations—such as a specification, delivery notes or different reports—are the most relevant types. Mailings and trade journals have a relatively low impact, judged by the rare identification of this type of touchpoint.

Table 81: Cross analysis of channels

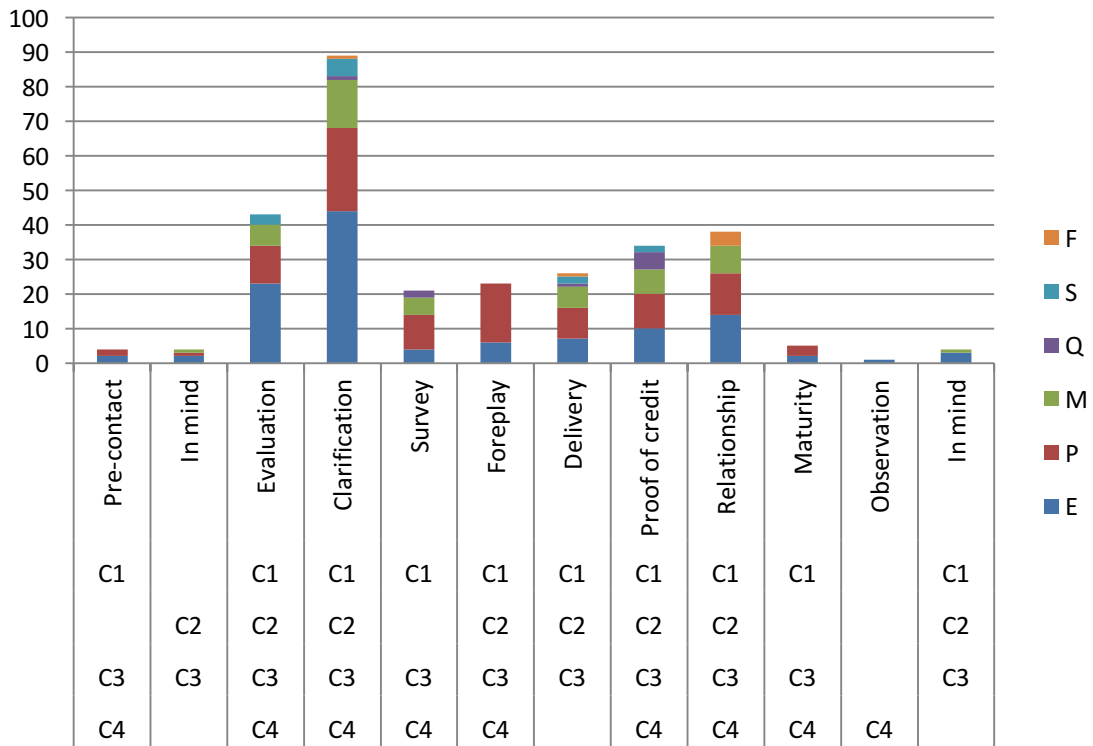
Channels		Case 1	Case 2	Case 3	Case 4
Written “hardcopy”	Documents	x	x	x	x
	Books	x			
	Catalogue		x		
	Facsimile			x	
Electronic	Internet	x	x	x	x
	Email	x	x	x	x
	ERP system	x			x
Instant	Telephone	x	x	x	x
	Face to face	x	x	x	x
Visual	Visual appearance	x	x	x	x
Function	Product (performance)	x	x	x	
	Packaging		x	x	
Symbolic	Gifts			x	
Resonance	Mind	x	x	x	

Visual observations—for example, seeing the facility or the product or observing product performance—are emerging channels. The functionality of the packaging also has a certain influence on perception. The mind itself, as the storing vehicle, serves as a channel to recall past experience and this stored experience in the mind influences the assessment (Dror, 2005) during the whole business relationship.

The following section presents the main brand association factors during the identified business relationship phases, considering the cumulative results from Cases 1 to 4.

4.2.5.2 Cross analysis of phases and the main brand association factors

From the four cases, 12 phases are identified. In two cases the buying centre members started by stating that they begin the process with the supplier brands they have in mind. In three cases, the buying centre members mentioned that experiences with suppliers reside in one’s mind and even though a business relationship had to be terminated, a future business relationship is not excluded. Figure 19 represents the number of identified touchpoints for each buying centre member and the cumulated rating of all the members during the particular phase.



E: Engineering / P: Purchasing / M: Management / Q: Quality management / S: Sales / F: Finance / C1- 4: Cases 1-4

Figure 19: Cross analysis Importance of phases and involved business functions

The visualisation shows that the clarification phase is the most influential phase for perception of the supplier brand. In total, many of the buying centre members recalled and or rated touchpoints during this phase. The evaluation phase is the second most influential phase. It comprises touchpoints that do not have any interaction. A very limited number of touchpoints resonate in the minds of the buying centre members during the pre-contact phase. This indicates that the standard channels—such as mailings and reports in trade journals—have a relatively low impact. The touchpoints during the evaluation phase—the active search initiated through a particular task—seem to have a higher impact. The engineering business function has an above average involvement during the two most influential phases. Moreover, the engineering has the most touchpoints in mind for all phases. The business function with the second most touchpoints in mind is the purchasing function. The third most involved business function is the management business function. It is noticeable that only the purchasing and engineering business functions care about the foreplay phase. The relationship and proof of credit phases have a similar influence on the perception of the buying centre.

Based on the presented results, the influence is particularly high at the beginning of the business relationship and increases again when the customer has a problem or wants to improve an existing solution.

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

Phase:	Pre-contact
Factors:	-Solutions -Competence -Capabilities -Respect

The earliest touchpoint identified during the pre-contact phase is the “reference during seminars”, which the engineer in Case 1 mentioned.

Otherwise, the buying centre members mentioned gaining perceptions of potential suppliers through trade journals, the receiving of different documents—such as mailings or brochures—and during an acquisition call. Interesting is the touchpoint mentioned by the salesperson in Case 3, where the perception of a potential supplier is gained at a trade show in which the company in this case is one of the exhibitors. According to the results, the impact of promotional activities is relatively low during the pre-contact phase. Although this phase does not have a major impact on the perception, the perception of the engineer during the seminar at the university resulted in the desire to want to work with the presented brand. The main factors are the perception of solutions, competence, capabilities and respect. The value of respect is mentioned in the context of an acquisition call and the approach during a customer’s exhibition. During these two touchpoints, tactfulness is appreciated by acknowledging the answer “no” and respecting that the buying centre member is currently occupied. The salesperson is requested to have a certain sensitivity and appears to be a figurehead for the competence of the whole business relationship.

Phase:	In Mind
Factors:	-Competence -Product functionality

At the start of the evaluation phase, the buying centre reminds themselves about the known supplier brands. In summary, all three main business functions—purchasing, technician and management—mentioned this touchpoint and, in essence, they value the experienced competence and knowledge about the product functionality.

Phase:	Evaluation
Factors:	<ul style="list-style-type: none"> -Solutions -Capabilities -Clarity -Competence -Detail information -Openness -Reliability -Proximity

One of the main influential touchpoints during the evaluation phase is the survey of the homepage. It seems important that the homepage also appears during the search by Google considering the relevant search terms. A further relevant touchpoint

is visits to trade shows to evaluate potential suppliers. A more personal approach is the use of colleagues or their own network. A further natural approach includes consulting the existing supplier database. In some cases the evaluation is influenced by the given requirement of the customer or the customer's engineering has pre-defined a supplier for a particular component. Apart from the survey of the homepage, the buying centre forms its perceptions from people's opinions and through the staff and the perception of the product during trade shows. The buying centre values the perception of solutions and the general capabilities of the supplier brand. The buying centre expects detail information to be able to assess product suitability, especially if the buying centre is purchasing mainly standard components or products. The purchase function seems to generally value geographical proximity. The buying centre also values competence and the attitudes of clarity, openness and reliability. Many of the factors during this phase are influenced by the brand communication source via the survey of the homepage.

Phase:	Clarification
Factors:	<ul style="list-style-type: none"> -Competence -Understanding of requirements -Price/performance -Openness -Product functionality -Reaction time -Availability -Interest -Responsiveness

The clarification phase is the most influential phase. One reason is that during this phase the first intense interaction is accomplished. Throughout all cases, the ability to clarify technical issues is very influential. For a standard product, focus lies on the clarification of product functionality. For a customised component, focus lies on discussing the feasibility to solve specific requirements. In all cases the visit of the supplier and receiving an offer are touchpoints that remain in the minds of the buying centre. In addition, the first product samples are examined. The main valued factor is competence, followed by the understanding of the requirements. The price/performance plays an important role. Product functionality, availability and the reaction time, as well as the supplier's attitude towards openness, responsiveness and the perceived interest, are valued. During this very influential phase, where various associations are formed, the main and almost exclusive sources of influence are the sales and the engineering business function of the supplier brand.

Phase:	Survey
Factors:	-Orderliness -Reliability -Competence -Capability -Systematic

The survey phase contains only one touchpoint, the visit to the facility of the supplier. All buying centres, except Case 2, mentioned this touchpoint.

In Case 1, this touchpoint seems to be the most influential. Although the rating is relatively low in Cases 3 and 4, this touchpoint is assumed to be influential since it comprises a variety of aspects that are perceived to be very influential. One of the most influential factors is the attitude towards orderliness, which is also interrelated to the second influential factor of reliability. Apart from the attitude, competence and capability are aspects that are perceived during the visit to the supplier's facility. Apart from the salesperson, visits offer the buying centre members the opportunity to get to know the other staff members. The physical evidence and the organisation serve as sources to generate associations.

Phase:	Foreplay
Factors:	-Competence -Product functionality -Reliability -Speed -Flexibility -Openness -Price/performance

During the foreplay phase, the purchasing and engineering business functions seem to merely interact with the salesperson of the supplier brand. The main influential activities during this phase are price negotiation and placement of the order.

During this phase, competence is one of the main valued factors. Besides product functionality, the previously estimated reliability becomes an experienced reliability; for example, the stated "in advance" availability is demonstrated. The attitude towards openness and the attitude and capability towards flexibility are valued factors. The speed and price/performance ratio are also valued factors during the foreplay phase. Overall, the foreplay phase is about getting the system to operate and both parties receive a first impression about the future working relationship and the operational performance.

Phase:	Delivery
Factors:	-Reliability -Product functionality -Simplicity

The delivery phase describes mainly the delivery of the products. During this phase the buying centre's extent of responsibility appears to determine

whether the buying centre perceives the actual delivery or is even involved in handling the products. In Case 4 none of the buying centre members mentioned a delivery phase touching point. In Cases 2 and 3 some of the members are involved in the installation and the commissioning of the products. During the delivery phase the reliability and product functionality are valued and in Cases 2 and 3 are directly experienced factors. The main sources during this phase are again the salesperson and, of course, the product itself.

Phase:	Proof of credit
Factors:	<ul style="list-style-type: none"> -Solution orientation -Openness -Competence -Honesty -Product functionality -Detail information -Reaction time -Willingness to take over responsibility -Logic -Reliability -Commitment

During the proof of credit phase, quality issues are the main touchpoints in the minds of the buying centre members. In case 4 the general support and in Case 1 delivery problems are also identified as touchpoints. The main valued factor is the solution orientation. The buying centre also values competence and the attitudes of openness, honesty,

the willingness to take over responsibility and commitment. Obviously, the product functionality is valued and directly experienced during this phase. The buying centre also values reaction time and the delivery of detail information so that they are able to solve their own problems and ensure that failure is not repeated. Based on the detail information, the buying centre also reviews whether their own system needs to be adapted. During this phase the salesperson, the engineering and the quality management act as sources. In Case 2, the management function stated that it is sometimes better to talk with the quality management as this business function mostly has an unbiased perspective (Management “M” Case 2, interview, 10 August, 2012).

Phase:	Relationship
Factors:	<ul style="list-style-type: none"> -Customer orientation -Openness -Partnership -Continuity -Willingness to learn -Solutions -Strategic fit -Solution orientation -Transparency -Ability to improve

All buying centres mentioned touchpoints that match to the relationship phase. However, there are major differences in the markedness of the phase. In Case 2 only one touchpoint is identified, that being newsletters. Newsletters are also identified as a touchpoint in Cases 1 and 3. The issue of price is

a reappearing topic during the relationship phase. Otherwise, the identified touchpoints in the minds of the buying centre members are dissimilar. The valued attitudes are customer orientation, openness, partnership, continuity, willingness to learn, solution orientation and transparency. Solutions, the strategic fit and the ability to improve are also valued factors. The main sources are the salesperson, the engineering, brand communication and indirect perceptions through colleagues. Overall, it is apparent that the emphasis on attitudinal factors appears to increase during this phase.

Phase:	Maturity
Factors:	<ul style="list-style-type: none"> -Business-like -Relationship orientation -Understanding

The maturity phase includes only one touchpoint, the termination of business, and is identified in Cases 1, 3 and 4. In Case 2 none of the buying

centre members experienced a termination of business; an explanation is in the

independent business relationship. On the other hand the importance of the recently conducted business termination in Case 3 is perceptible. Generally, business-like behaviour is valued. In Cases 3 and 4 the buying centre members mentioned the value of a relationship orientation since a business relationship in a B2B context cannot be immediately terminated and can potentially again become a future business relationship.

Phase:	Observation
Factors:	-Fit for strategy -Solutions

In Case 4 the engineering function mentioned active observation of past suppliers. During this phase, the engineering function perceives the strategic fit and the presented solutions by studying the brand communication through the internet.

Phase:	In mind
Factors:	-Competence -Capability

In three of the four cases the experience residing in the mind is identified as the last touchpoint. It was mainly the engineering business function who mentioned this aspect, but in one case the management also did. The competence and the various capabilities are appreciated and the experience resides in the minds of the buying centre members. This information is potentially considered for future tasks.

In summary, the impact of brand communication or sales activities seems to be relatively low during the pre-contact phase. During the evaluation phase, when the buying centre has a specific task to solve, the impact is much higher. The evaluation phase is also the second most influential phase. Some of the buying centre members explicitly mentioned that they consider the supplier brands in mind and that they value the known competence and experienced product functionality. During the evaluation phase, the survey of the homepage seems to be the most influential touchpoint. The solutions and the capabilities seem to catch the most attention during the evaluation for possible supplier brands and are mainly perceived through brand communication on the homepage. Beginning with the clarification phase—the most influential phase—the salesperson and the engineering of the supplier brand are the most influencing sources for the generated associations. Competence, already valued during the pre-contact phase, is the main factor during the clarification phase. Apart from the ability to understand the requirements and the price/performance ratio, the attitudes of openness, interest and responsiveness are valued. The survey phase, if accomplished, serves to distinguish the reliability; the orderliness, competence and perceived capabilities are also valued factors. During the foreplay phase,

the framework for the delivery phase is set up. During this phase, the reliability of previous statements is perceived. In addition, competence, speed and the attitude towards flexibility and openness are valued. The reliability and the product functionality are the main valued aspects during the delivery phase. During the proof of credit and the relationship phase, which belong to the top four influential phases, the attitude factors of the supplier brand are the most influential. During a termination of business an expedient behaviour, which enables a relationship to be kept, is valued. Such behaviour increases the chance to be considered for future tasks, since the competence and capabilities that are experienced will rest favourably in the minds of the buying centre members.

4.2.6 Conclusion to the business relationship characteristics

The analysis of the business relationship characteristics identified some particular influential touchpoints, which has helped to define a set of phases. The main valued brand association factors within the identified set of phases were recognised by considering their frequency within the phases. The identified touchpoints, and the involved business functions enabled to discover the main sources, the characteristics of the channels and to define which business functions are mainly involved. As discovered during the analysis of the brand association factors, the relationship characteristics are influenced by the business context and the buying centre member's individual history within the company. Moreover, the relative share of individual identified touchpoints also shows high variability. On the other hand, the analysis from a holistic viewpoint has helped describe a general view (Table 82).

Table 82: Business relationship characteristics

Competence Capabilities Product functionality Attitude					Resonance through valued gained knowledge of brand assets and product functionality
Relationship					Image generation through Sales Engineering Product
Proof of Credit					
Delivery					
Foreplay					
Survey					
Clarification					
Evaluation					Awareness generation through -Brand communication -Products and -Knowledge of others
Pre-contact					
Phases	Influence		Main factors		Brand Equity process

Author's own construction

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

The pre-contact phase stands for the phase in which the customer unintentionally receives information or is contacted by a potential supplier brand. Interestingly, not many buying centre members mentioned corresponding touchpoints, which indicates a low impact for such activities.

A more effective impact is achieved when the buying centre is actively looking for a supplier who could help solve a specific task. Many buying centre members mentioned touchpoints during this evaluation phase and several rated the inherent touchpoints as important or even as very important. In particular, the survey of the homepage is very effective; a possible explanation is the constant availability and the unrestricted access to information on the homepage. During these first two phases, the first awareness is generated and the customer starts to develop knowledge about the brand. Although attitude plays a role, the focus during these first phases is on the solutions, capabilities and competence of the brand. Furthermore, one of the main factors identified is the value of competence; the main sources identified for knowledge are colleagues and personnel networks. Other important sources are brand communication and the product itself.

The most influential phase is the clarification phase, where the customer actively approaches the potential supplier brand to clarify technical, price and further business issues. During this phase competence and the ability to understand the requirements are again the main brand association factors. The variety of the identified sources is limited to the sales and the engineering business functions.

The influence and the execution of the survey phase are influenced by its effect on the goods or products purchased by the customer. In Case 1, the buying centre purchases customer-specific components, which are produced by a manufacturing service provider. Correspondingly, this phase is much more important for the buying centre in case 1 and the touchpoint—survey of the facilities—is even the most influential touchpoint in this case. The perceived reliability and the orderliness are the main factors that are valued during this phase.

The foreplay phase is the phase that demonstrates the operative performance of the organisation and how the supplier brand deals with concrete demands. In addition, competence, product functionality and the results from possibly tested samples are valued. During the delivery phase, promises are executed or not and give a picture about the reliability and product functionality.

During the proof of credit phase, the invested trust is justified. Regarding the statements of the buying centre members, they do not expect that there will be no failures. The difference lies in how the supplier reacts during the touchpoint of product failure or other quality issues. The attitudes of solution orientation and openness are valued.

Next to the openness, customer orientation is valued during the following business relationship. In Case 2 the buying centre does not show much interest in an active relationship. This is believed to be caused by the added value of Case 2 is not directly depending on a particular product. In essence, the buying centre does keep competence, capabilities and product functionality in mind, which determines any consideration of the supplier for future business opportunities. The results also show that next to competence and capabilities, the attitude becomes increasingly relevant as the business relationship develops.

Considering the patterns of sources and channels throughout the business relationship, the first impression is distanced and dominated by brand communications, word-of-mouth communications and the product itself. During the business relationship, the relationship becomes increasingly interactive and strongly influenced by the sales and the engineering business functions. As discovered during the analysis of the brand association factors, the relational quality towards the sources can lead to the buying centre members assigning relational aspects to the corporate brand. Apart from the purchasing and the management, the engineering business function appears to be one of the main buying centre members. Furthermore, the group of influencing business functions increases and influences the brand perception. The buying centre members frequently refer to the supplier by using the personal pronoun “they”, which discloses their acknowledgement of the team; for example, “...*their strategy is problematic...*” (Engineering “HE” Case 4, interview, 18 December, 2012), “...*they take care of their customers...*” (Management “M” Case 2, interview, 10 August, 2012), “...*unmotivated people...*” (Management “M” Case 3, interview, 9 September, 2012), “...*they know our requirements*” (Engineering “E” Case 3, interview, 9 September, 2012). The variety of sources increases with the accomplished relationship intensity, which seems to be driven by the type of purchase and the customer perceived added value contribution of an intense relationship.

In some way the identified pattern of sources prompts the image of a football team. On the one hand the football team itself represents a unity and on the other hand the team members are also recognised as individuals. From this perspective, the industrial brand appears in the beginning as a brand, which incorporates a team and throughout the relationship with the brand, the team members obtain a centre role. The buying centre appears to recognise that it needs a team with each having their individual strengths to realise extraordinariness. For example, in the case of product failure it is advisable to talk with the quality manager and not the product manager (Management “M” Case 2, interview, 10 August 2012); the engineering of Case 1 values when they consider involving specialists for certain topics (Engineering “E” Case 1, interview, 2 February 2012). The unique composition of the team represents also a uniqueness of a brand. The buying centre members appear to have slightly different perspectives, which are determined through the area of responsibility.

Therefore, these varying perspectives of the three main business functions are described in more detail in the following section.

4.3 The main buying centre business function perspectives

The multiple case study identifies six business functions (see Table 83). Three recur in at least three of the four cases and three business functions are found to be case specific buying centre members, which are described in the respective case specific analysis. This section aims to present a united perspective of the three main recurring business functions by describing the most relevant touchpoints and the valued brand association factors. This section closes with a conclusion to the characteristics of the three main business function perspectives.

Table 83: Business function members per case

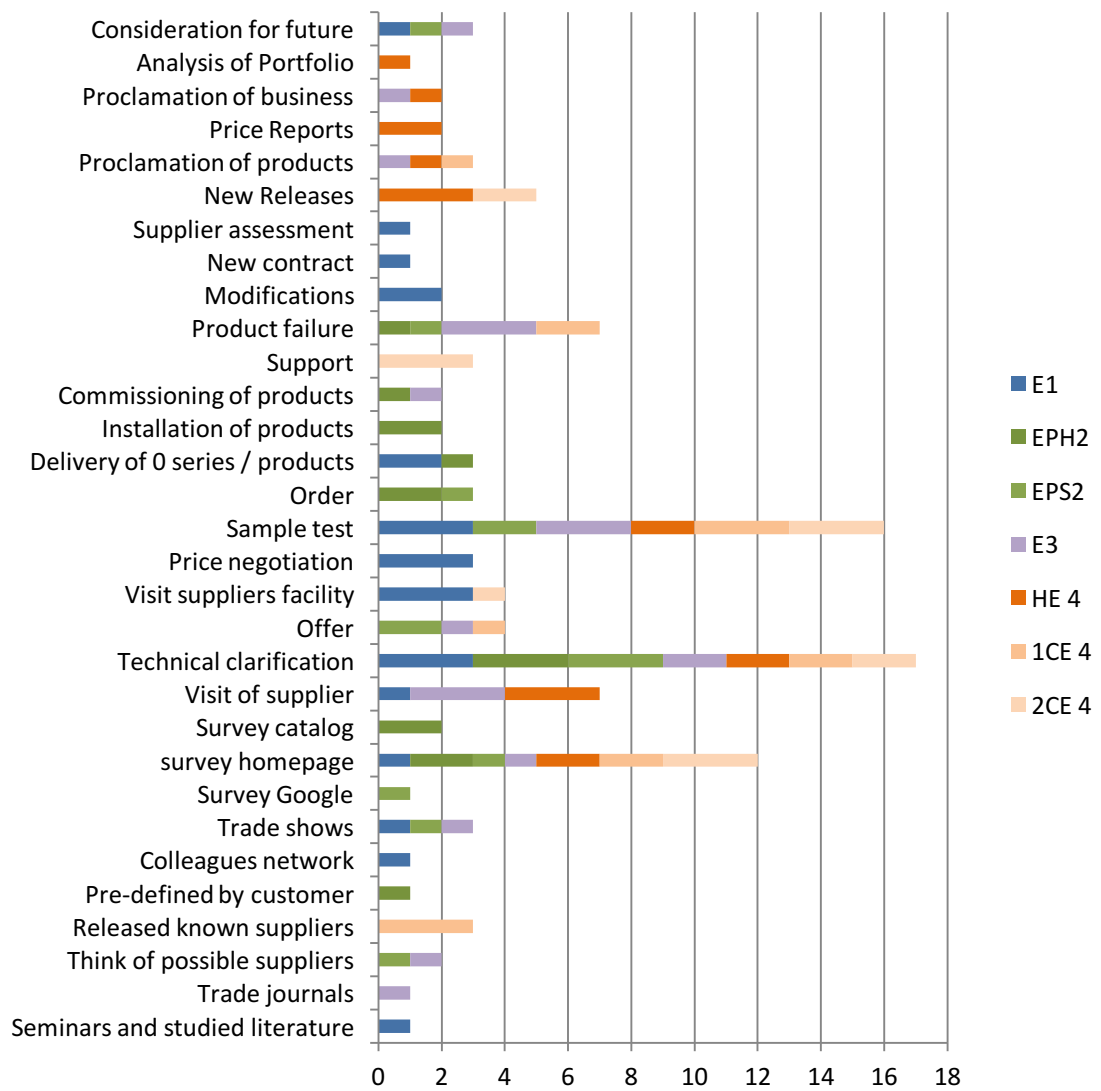
Business functions	Case 1	Case 2	Case 3	Case 4
Engineering	1	2	1	3
Purchasing	2		1	2
Management	1	1	1	
Quality management	1			
Sales			1	
Finance			1	

The engineering business function is represented in all four cases. In Case 2 even two of three and in Case 4 three of five functions are defined as having an engineering business function. The purchasing business function is part of the buying centre in three of the four cases. In Case 2 the purchasing function is not seen as part of the buying centre as the management allotted a straight operational task to the person in charge of placing the orders. In Case 1 the head of purchasing and the operative purchasing are part of the buying centre. In Case 4 one purchasing business function is mainly in charge of mechanical components while the other is mainly in charge of electronic components. In three cases, one buying centre member has a defined management role and is either part of the top management or has a CEO business function.

In the following three sections the identified engineering, purchasing and the management business function perspectives are described in a condensed form.

4.3.1 The engineering perspective

The following united engineering perspective consists of seven individual buying centre members. Overall, two to five touchpoints seem to have an above average influence (see Figure 20).



Engineering: E1: Case 1 / EPH2 & EPS2: Case 2 / E3: Case 3 / HE4, 1CE4 & 2CE4: Case 4

Figure 20: Cross analysis of engineering touchpoints

The leading touchpoints are the “technical clarification” and the “sample test”. Since one of the main reasons for the “visit of the supplier” is a clarification of a technical topic, the touchpoint of a “technical clarification” seems to have very high influence. The next most influential touchpoint is the “survey of the homepage” during the evaluation phase, followed by the occasion of a “product failure” during the proof of credit phase. These five touchpoints, of the identified thirty-one touchpoints, appear to have a high overlap, remain in the memory of the engineering business function and are also rated as important or even very important. Most of the thirty-one touchpoints are merely mentioned by one of the six engineering buying centre members, which indicates the individual impact of touchpoints and is either explainable through the case-specific setting or is influenced by individual experience (Dror, 2005).

Due to the frequency of the value of competence and the frequency of solutions, these two factors are the most influential factors throughout the business relationship (see Table 84). From the engineering perspective, competence refers mainly to the technical and product knowledge. Apart from detail information, which is mainly valued for standard product purchases, the openness, the product quality and the understanding of the requirements are very influential for the engineering business function.

Table 84: Cross analysis of engineering brand association factors

Holistic Engineering brand association factors – methods triangulation											
Frequency	Adapted critical incident technique	Cases				Free/Projective technique	Frequency	Cases			
		C1	C2	C3	C4				C1	C2	C3
29	Competence	C1	C2	C3	C4	Product functionality/quality	17		C2	C3	C4
29	Solution	C1	C2	C3	C4	Price/performance	12	C1	C2	C3	C4
15	Detail information		C2	C3	C4	Solution	11		C2	C3	C4
14	Openness	C1	C2	C3	C4	Customer orientation	7			C3	C4
14	Product functionality/quality	C1	C2	C3	C4	Continuity	5	C2			C4
13	Understanding of requirements	C1	C2	C3	C4	Size	5		C2		C4
10	Clarity		C2	C3	C4	Competence	4		C2	C3	C4
10	Reaction time	C1	C2		C4	Innovation	4		C2	C3	
10	Reliability	C1	C2		C4						
9	Customer orientation		C2	C3	C4	Summary technique					
8	Capability	C1			C4	Price/performance	3	C1	C2	C3	
8	Continuity			C3	C4	Competence	2		C2		C4
6	Interest		C2	C3	C4	Product quality	2		C2		C4
6	Price/performance	C1		C3	C4	Solutions	2				C4
6	Responsiveness	C1	C2	C3	C4						

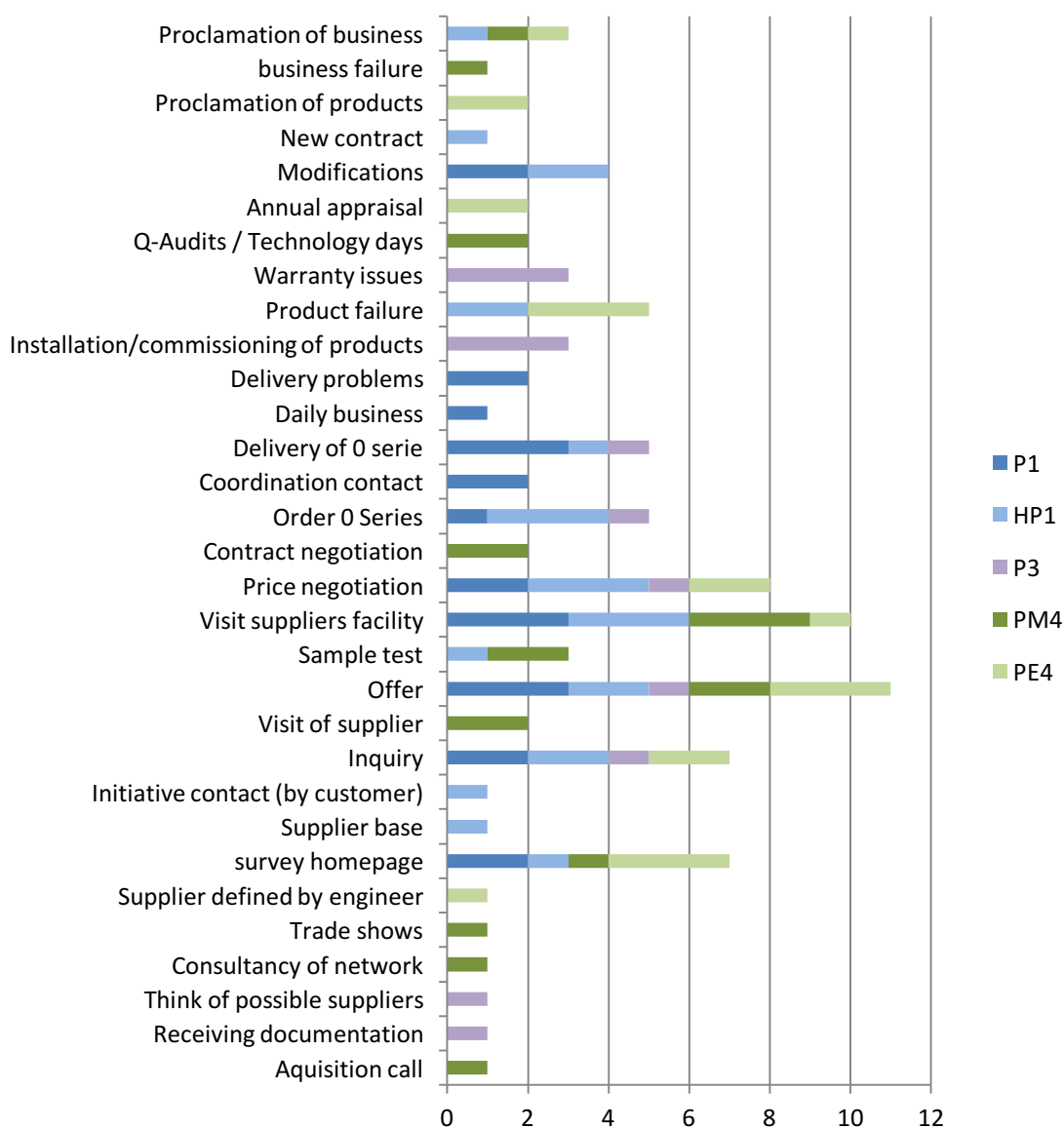
Triangulation (see Figure 10):

Competence
 Solution
 Quality
 Customer orientation
 Continuity
 Price

Due to the statements during the other exploration techniques, the importance of the product functionality/quality (◆), solutions (◆) and the value of competence (◆) are confirmed. The relevance of the price/performance (◆) factor is enhanced, which is only one aspect during a certain phase throughout the business relationship. These main factors reflect the main values of an engineering business function, which appreciates or even strongly requires a supplier brand to help solve business function tasks, such as finding and executing technical solutions for specific technical problems.

4.3.2 The purchasing perspective

In the case of the purchasing business function, five individuals are identified as being part of the buying centre. Concerning this subunit, eight of thirty-one identified touchpoints appear to have an above average influence (see Figure 21).



Purchasing: P1 & HP1: Case 1 / P3: Case 3 / PM4 & PE4: Case 4

Figure 21: Cross analysis of purchasing touchpoints

As one might expect, the “offer” of the supplier is the most influencing touchpoint for the purchasing business function. The second most influential touchpoint is the “visit to the supplier’s facility”, which is seen as very important since three of the four purchasing business functions have this touchpoint in mind. The most influential touchpoint is “price negotiation”. The next two influential touchpoints are the “survey of the homepage” and the perceived reaction during an “enquiry”. The next three influential touchpoints are the

“first order”, the “first delivery” and the perceived reaction during the occasion of a “product failure”. Although the overlap (20 of 31 are individual) is even lower than with the engineering perspective, the number of touchpoints with an above average influence is higher and therefore the impact also more spread in relation to the engineering perspective.

For the purchasing perspective, the perceived competence is one of the main factors throughout the business relationship. The competence mainly refers to the general technical knowledge and the perceived knowledge towards how to proceed (see Table 85).

Table 85: Cross analysis of purchasing brand association factors

Holistic purchasing brand association factors – methods triangulation											
Frequency	Adapted critical incident technique	Cases				Free /Projective technique	Frequency	Cases			
		C1	-	C3	C4			C1	-	C3	C4
16	Competence	C1	-	C3	C4	Price/performance	12	C1	-	C3	C4
15	Openness	C1	-		C4	Reliability	11	C1	-		C4
10	Reliability	C1	-	C3	C4	Quality	7	C1	-	C3	C4
9	Solutions		-	C3	C4	Continuity	6	C1	-	C3	C4
7	Flexibility	C1	-	C3	C4	Flexibility	6	C1	-		C4
7	Understanding of requirements	C1	-		C4	Expensive	5	C1	-		
6	Accurateness	C1	-	C3		Solutions	5		-	C3	C4
6	Capabilities		-		C4						
6	Honesty	C1	-	C3	C4	Summary technique					
6	Partnership	C1	-	C3	C4	Price/performance	3	C1	-		C4
6	Price/performance	C1	-		C4						
5	Continuity	C1	-	C3	C4						
5	Product functionality/quality	C1	-	C3							
5	Proximity	C1	-	C3	C4						

Triangulation (see Figure 10):

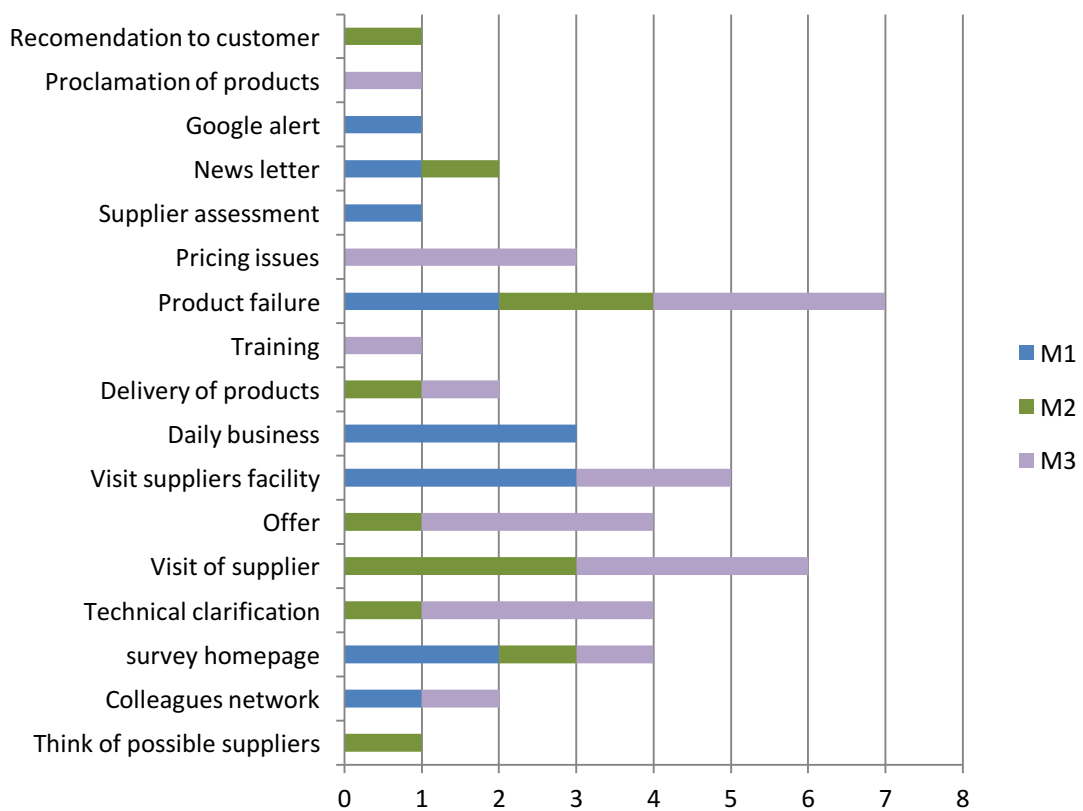
■ Reliability
 ■ Solution
 ■ Flexibility
 ■ Price
 ■ Continuity
 ■ Quality

The values of reliability (◆), solutions (◆) and the flexibility (◆) have a high frequency and recur with another exploration technique. The aspects of openness and understanding of requirements are also relevant brand association factors. Solutions, openness and understanding of requirements also represent some of the main valued factors of the engineering business function. More business function-specific factors are the perceived accurateness, honesty and partnership. Corresponding to the engineering business

function, the value of price/performance (♦) is enhanced by the results from the other exploration techniques. Interestingly, the factor flexibility is not identified as a main valued factor of the engineering business function. A further unique purchasing perspective and case overlapping factor is the value of proximity.

4.3.3 The management perspective

In three of the four cases, a member of the management is part of the buying centre. As can be seen, the identified 17 touchpoints (see Figure 22) are much lower in relation to the united engineering and the purchasing business function perspectives.



Management: M1: Case 1 / M2: Case 2 / M3: Case 3

Figure 22: Cross analysis of management touchpoints

Interesting is the identified relevance of the “product failure” touchpoint. All three management members have this touchpoint in memory; two of the three rate this touchpoint as very important and one rates it as important. The second most influential touchpoint appears to be the “visit of the supplier”, which two of the three mentioned and see as very important for the perception of the supplier brand. The third most important touchpoint is the “visit to the supplier’s facility”; following is the “survey of the

homepage”, the “technical clarification” and the “offer”. Considering these six most influential touchpoints, the management business function perspective seems to consist of a mix of the purchasing and the engineering perspectives. The relevance of the “visit to the supplier’s facility” and the “offer” correspond to the purchasing perspective. On the other hand, the relevance of the “technical clarification” is more comparable to the engineering perspective. In relation to the engineering and the purchasing business functions, the management members appear to have a higher overlapping of the touchpoints in mind.

Corresponding to the other two business functions, the perception of competence, solutions, understanding of requirements and openness are valued factors (see Table 86).

Table 86: Cross analysis of management brand association factors

Holistic management brand association factors – methods triangulation											
Frequency	Adapted critical incident technique	Cases				Free/Projective technique	Frequency	Cases			
		C1	C2	C3	-			C1	C2	C3	-
16	Competence	C1	C2	C3	-	Technology	5	C1	C2	C3	-
7	Solutions		C2	C3	-	Functionality	4	C1	C2		-
5	Transparency	C1	C2	C3	-	Product quality	4	C1	C2	C3	-
5	Understanding of requirements	C1	C2	C3	-	Reliability	4	C1		C3	-
4	Clarity		C2	C3	-	Innovation	3	C1	C2		-
4	Openness		C2	C3	-	Price/performance	3	C1	C2		-
4	Product functionality/quality		C2	C3	-						
4	Reliability	C1	C2	C3	-	Summary technique					
						Competence	3	C1		C3	-
						Price	3	C1			-

Triangulation (see Figure 10):

Competence
 Quality
 Reliability
 Price

The valued competence (♦) seems to mainly focus on technical knowledge and the knowledge towards solution development and is also identified with the summary technique. A specific focus of the management business function lies on the value of transparency. The price/performance factor is not identified as one of the frequently mentioned factors during the business relationship. Nevertheless, the value of the price/performance factor (♦) is reinforced by the results of the other exploration techniques. The value of reliability is similar to the purchasing perspective. The factor of reliability (♦) is enforced by the identification with a second exploration technique.

Additionally, the value of product functionality/quality (♦) is identified with two techniques.

Stemming from these results, the management function appears to have a deduced and aggregated engineering and purchasing perspective. A specific factor is the value of transparency, which stands for the communication about the capabilities and strategy.

4.3.4 Conclusion to analysis of the main business function perspectives

The united business function perspective discloses some focal points of the three main business functions. The results of the business function-specific analysis also offer a base to describe the characteristics of customer-based brand equity in industrial markets. All three business functions have a strong emphasis on competence and ability to accomplish solutions (see Table 87). Nevertheless, the valued knowledge has a slightly different characteristic. The engineering is more focused on product knowledge; the purchasing focusses on knowledge for ways in which to proceed; and the management values the solution competence. All three business functions value technical knowledge.

In addition, all three value the ability of understanding requirements and the attitude of openness. Apart from these softer factors, all three value product functionality/quality and the price/performance factor.

Considering the business function-specific particularity of the valued competence and the main business function-specific factors, the following customer-based brand equity characteristics are noticed.

Table 87: Business function-specific brand association factors

Engineering	Purchasing	Management
Competence, Solutions, Understanding of requirements, Openness, Product, Price/Performance		
-Detail information -Reaction time	-Flexibility -Accurateness -Honesty -Partnership -Proximity	-Transparency

Identified brand association categories (see Section 4.1.6):

Knowledge
 Capability
 Attitude
 Relationship
 Delivery

The focus of the engineering in technical and product knowledge and the specific value of detail information and reaction time can be explained by the engineering's needs. As the engineer is assigned to find technical solutions to a given deadline, the business function values a fast reaction and delivery of detail information to solve a technical issue. The purchasing function—which is confronted with the task of organising the needed components and products to serve their own customer's needs—values flexibility and accurateness. Furthermore, the purchasing values honesty to be able to look for another solution in the case that the current supplier is not able to deliver towards the required deadline. The partnership focus and the value of proximity of the purchasing are believed to be explained by the fact that the purchasing is the business function that has a continuous dependence on the supplier's performance for fulfilling their own objective. On the other hand, as soon as the engineering has solved a technical issue, the engineering can move on to the next technical issue. Nevertheless, the engineer also values the relationship with technically competent staff members of the supplier brand. The management focuses on transparency, which this business function is dependent on to make the right strategic decision. The large overlap with the other two business functions discloses the emphasis to receive a general picture of the supplier brand.

Based on this derivation and the results of the analysis, the business functions appear to emphasise different aspects in relation to their role in the organisation. It can be argued that from a business function viewpoint, a supplier brand is valued the more the brand serves to achieve the own business function's specific task. An above average business function-specific brand performance possibly leads to an above average fulfilment of the buying centre member's task. For example, if purchasing were confronted with an unexpected need for material, they would need a good partner supplier. On the other hand, the purchasing function who succeeds is possibly honoured by the organisation and is perceived as a good purchaser. Corresponding to this finding, the touchpoints with an above average resonance and rating appear to be particularly relevant for the business function's area of responsibility. On the other side, the results of the case-specific analyses demonstrate a large variability, which appears to be influenced by the individual history and case-specific range of tasks. In this sense, there appear to be some general business function-specific patterns; however, the individual's case-specific range of tasks also needs to be considered.

For a comprehensive overview, the following section summarises the business specific findings, the insights about the characteristics of the business relationship and the overlapping brand association factors.

4.4 Overall summary of findings

The findings suggest defining knowledge, capability and attitude as the three main brand assets (see Figure 9, 1. Brand assets & Section 4.1.6). Various favourable characteristics (see Figure 9, 1.2 brand associations) have been identified (more than 83, see Appendix E). The main buying centre members appear to share the value of competence, solutions, understanding of requirements, openness, product quality/functionality and an attractive price/performance ratio (see Figure 9, 2. Perception of buying centre members & Section 4.3.4). Furthermore, the business functions seem to value business function-specific brand association factors (see Figure 9, 2.1 business function & Section 4.3.4). The engineering particularly values detail information and reaction time. The purchasing business function values flexibility, accurateness, honesty, partnership and geographical proximity. The management particularly values transparency. On the other hand, the case-specific findings also indicate that the valued factors are task-based and related to the business function's case-specific range of tasks. Additionally, the findings show that the specificity of the purchase performance influences the characteristics of the valued brand association factors (see Figure 9, A. business context). The relationship characteristics are also influenced by the business context. On the one hand, the potential added value contribution through optimising the joint-work appears to intensify the relationship. On the other hand, the added value contribution to the customer's own communicated market contribution appears to influence the value of an intense relationship to the supplying brand. The relationship is divided into eight phases; the pre-contact phase, the evaluation, the clarification, the survey, the foreplay, the delivery, the proof of credit and the relationship phase (see Figure 10, 3. Business relationship). The focus on particular brand association factors change throughout the different phases. At the beginning, capability and competence are particularly valued; during the later phases the perceived attitude becomes more relevant (see Section 4.2.6 & Table 82). Brand awareness is generated through the brand communication efforts and the perceived products. On the other hand, the knowledge of the buying centre member's network is actively approached and generates brand awareness during the evaluation phase. During the evaluation phase—the main brand awareness generating phase—the touchpoint (see Figure 10, “blue arrows”) through internet is seen to have a particular impact. On the other hand, the

influence of the touchpoints varies depending on the business context and the business function perspective. The purchasing business function particularly values the offer and the visit to the supplier's facility. The engineering is particularly sensitive during the technical clarification and the sample test touchpoints. The management is particularly focussed on behaviour during a product failure. The clarification phase is the phase with the highest impact on the perception of the buying centre. Later on the influence drops, but increases again during the proof of credit phase and the relationship phase. The main influencing sources (see Figure 10 "blue boxes") are the engineering, the sales business function and the product itself. Nonetheless, other employees of the supplier, such as the order processing, quality management and production also influence the buying centre's perception. Based on the pattern of the identified sources and the description of the participants, the brand appearance is characterised by the perception of a team, but as the business relationship progresses the team members move into the focus. The communication starts with one-way brand communication but the relationship becomes interactive during later stages of the business relationship. Noticeable is that the more a business function interacts with the staff of the supplier brand, the more valued the relational aspects appear to be. As mentioned, the added value contribution influences the brand relationship and therefore also the brand resonance (see Figure 9, 1.3 brand resonance & Section 4.2.6). Furthermore, the brand resonance is characterised by the buying centre's value of being familiar with the competence, the capabilities, the product functionality and the attitude of the team brand (see Table 82, 1.3 & Section 4.2.6).

The findings chapter closes with this summary. The next chapter discusses the findings of the brand association characteristics, the business relationship characteristics and the findings towards the main business function perspectives in light of the current brand equity literature and describes the development of an industrial context-based and customer-based brand equity model.

5 DISCUSSION

The structure of the following discussion is based on the outlined research questions (see Section 2.4) and aims to determine the meaning of the presented findings in the context of the existing literature. The first section is dedicated to comparing the identified brand association factors with the findings of previous work and fathoming the underlying composition of customer-based brand equity in the outlined industrial markets. The next section discusses the identified business relationship phases and the interrelated factors in light of the current knowledge of the B2B (business-to-business) characteristics. Following, the identified main sources and channels are discussed in relation to the current literature statements. The identified business function perceptions are discussed in relation to existing statements of current work. This chapter ends with the construction of an elaborated framework and a presentation of an industrial customer-based brand equity model, which was developed from the main findings and the previous discussion.

5.1 Composition of customer-based brand equity in industrial markets

As outlined in Section 2.1.4, the review of three leading customer-based brand equity models has defined three basic stages of assets: brand awareness, brand associations and brand resonance. The brand associations include a variety of subtopics, such as brand values, personality and performance (see Table 3). On the other hand, the findings induce that the perceived knowledge, the capability and the perceived attitude comprise central assets of a B2B brand. Additionally, the buying centre members are found to have heterogeneous perspectives about the valued characteristics of these assets, which are driven by their particular range of tasks within the company. The specificity of the purchase performance is found to form the asset characteristics.

The accomplished exploration and analysis have identified various associations, which are formed during the pre-contact phase, the evaluation phase and the following business relationship phases. Based on the identified frequency, the most influencing factors appear to be the perception of **competence** and **solutions**, followed by the **price/performance** and **product functionality/quality**. In addition, the attitudes towards **reliability**, **openness**, **continuity** and **customer orientation** are valued brand association factors.

- The relevance of competence is addressed by the rational factors experience/expertise and advice defined by Bausback (2007), Mudambi et al. (1997), Persson (2010) and Lennartz et al. (2015). Beverland et al. (2007) also mention the aspect of advice as one of the positioning attributes. Herbst & Merz (2011) list the personality aspects of being experienced, intelligent and educated and labelled one of their performance categories with the term competent. Nevertheless, only the aspect of being experienced fits with the definition of competence (see Chapter V). It is noticeable that the literature about service quality describes competence as a determinant of service quality (Parasuraman, Zeithaml, & Berry, 1985). The IMP Group states that a lack of expertise can prevent a business relationship (2002). To summarise, competence stands for the value of knowledge, which helps the customer to solve a technical or any other business-relevant issue in the best way possible and helps the customer to improve their competitive position.
- The brand association factor solutions is partly described by the factor of adaptation identified by Beverland et al. (2007), the rational factor integration defined by Bausback (2007), the factor of being compatible with existing systems defined by Kuhn et al. (2008), the factor degree of precision and the factor for the purpose over engineered defined by Mudambi et al. (1997). Person (2010) on the other hand defined the category product solution and listed the factors total solution, customisation and the assortment itself as relevant brand determinants. The factor solutions stands for technical performance, which helps the customer find a competitive and suitable solution for a particular technical problem.
- The product functionality, which also includes the aspect of product quality is identified as a valued factor by several authors (Bendixen et al., 2004; Leek & Christodoulides, 2012; Persson, 2010). There is no doubt about the relevance of product quality. Nevertheless, it seems to be more sensible to define this aspect as product functionality. On the one hand the perceived quality seems somewhat relative as the focus lies on what is needed for the application. On the other hand, the function itself seems to be the leading part of the perceived quality. Still, on the other side of the coin stands the price, which is compared with the obtained performance.

- The price as a topic is mentioned by Bendixen et al. (2004), Leek & Christodoulides (2012), Bausback (2007) and Kuhn et al. (2008). Bausback (2007) describes the aspect of price negotiation, which is treated as a separate factor in this project and is found to be a valued factor in case 4 where it is described as the willingness to negotiate. The price is a relevant issue; on the other hand, as with the perceived quality, it appears to be somewhat relative and basically has to fit the requirements.
- The value of reliability is mentioned by Kuhn et al. (2008), Persson (2010), Mudambi et al. (1997), Bausback (2007), Leek & Christodoulides (2012), Bendixen et al. (2004) and Herbst & Merz (2011). As described by Bendixen et al. (2004), reliability appears to be an aspect that is judged in advance and, on the other hand, is a factor which is directly experienced by a fulfilment of a promise. Therefore, the perception of reliability is seen to be a valued attitude perceived during the first business relationship phase and is an experienced valued capability during the delivery phase.
- So far, the current B2B brand equity literature has not identified openness as a valued brand association factor. On the other hand, the value of the attitude openness is identified as a frequently identified factor, which becomes particularly relevant during phases where the exchange of information is needed to either develop a technical solution, to ensure the stability of the developed solution or when the information is needed as a basis to plan and take measures. The value of detail information is identified as a relevant factor in this research project. It is also identified as a factor by Bausback (2007) and addressed by Persson (2010) who defined information exchange as one of the brand determinants. In a wider context, the aspect of openness concerning technical information is also discussed under the open innovation concept, which seems to be an upcoming topic (Huizingh, 2011). The open innovation approach appears to be increasingly adopted by companies; one of the utilised information sources is the supplier (Van de Vrande, De Jong, Vanhaverbeke, & De Rochemont, 2009).
- The aspect of continuity is touched on by Kuhn et al. (2008), who list the stability of the company as an important factor, and Mudambi et al. (1997) who define the

financial stability as a tangible value. The continuity factor is valued mainly during the relationship phase and is identified mainly in the context of the product, the contact person or the company itself. The value of continuity of the product is driven by the often costly technical adjustment on the own system (Hutt & Speh, 2004). Furthermore, emphasis on the continuity of the company and the contact person seems to be driven by the existing well established activities between the organisation and the individuals involved (IMP-Group, 2002).

- The aspect of customer orientation seems not to be mentioned by the current literature. Nevertheless, during this research project the buying centre members frequently mentioned the value of perceiving that the supplier brand takes over the perception of the customer. The customer orientation is perceived during the occasion of the discontinuation of products, the delivery of products and is also perceived by the setup of the homepage. The delivery should be organised to serve the customer's needs and not merely follow the easiest internal procedure. For example, in Case 2 it happened frequently that one unique order arrived in bits and pieces on different days (Engineering "EPH" Case 2, interview, 13 August, 2012). The reason for the separate deliveries is explained by the fact that the components are stored in different stocks, which possibly, out of a purely internal view, is the most efficient solution. Nevertheless, the customer is left to deal with the co-ordination of the separate deliveries. The labelling of the delivery also occasionally includes abbreviations and barcodes, which are not self-explanatory. In addition, the discontinuation of products requires a certain empathy. Forward-thinking communication and activities help ensure availability regarding customer's solutions. Finally, the management in Case 2 mentioned that the homepage structure and the communication should give more attention to the engineering's perspective and not merely present a self-adulation with graphics and a sales argumentation (Management "M" Case 2, interview, 10 August, 2012). This sensitivity towards the customer's perspective is summarised by the term customer orientation and is believed to be one of the most influencing attitude factors.

These eight factors appear to be the most influential brand association factors out of the eighty-three identified brand association factors (see Appendix E).

The identified frequency of the valued brand association factors seems to be partly in line with the ranking of Bendixen et al. (2004). The findings support that the product quality seems to be more relevant than the reliability and capability (performance). Regarding the analysed cases, the price/performance aspect seems to have more relevance. On the other hand, the most frequent brand association factors—competence and solution—are seen to be absent in the list of Bendixen et al. (2004). This is particularly interesting since these two factors seem to be even more valued than the product quality. However, it must be considered that a large amount of the frequency of the solution factor is identified during the after-sales phase, which Bendixen et al. (2004) lists as the rank 4 criterion. Furthermore, a large part of the detected frequency of competence is perceived during the business relationship, identified with the adapted critical incident technique and is not often directly identified with the other exploration techniques. Hence, it seems that the identification of this value lies in the applied critical incident technique, or the product market of the indoor medium-voltage circuit breaker panels is rather insensitive towards the value of competence. Nonetheless, based on the findings of Bausback (2007), Mudambi et al. (1997), Persson (2010), Beverland et al. (2007) and Herbst & Merz (2011), the competence appears to represent a valued factor.

About 36 of the 83 brand association factors are found to be directly represented in the current literature (see Appendix E). Not directly mentioned in the literature are the described factors of customer orientation, openness and the following grouped factors (see Table 88).

Table 88: Brand association factors - relevance and state of knowledge

Relevance	Represented in literature	Newly discovered
Highly relevant	-Competence -Solutions -Product functionality/quality -Price/performance -Reliability -Continuity	-Openness -Customer orientation
Lower relevance	See Appendix E	-Substance of communication - Clarity, transparency -Engagement - Social competence, interest -Procedure - Systematic, accurateness, orderliness -Business - Fairness, business-like -Willingness to take over responsibility -Development - Willingness and capability -Relationship - Visibility, ownership, history, general fit, distribution of power, geographical proximity, pleasant relationship, familiarity, engagement

- The factors of clarity and transparency both relate to the substance of the communication. Clarity is about being able to bring it to the point. Transparency represents the value of being transparent about the own motivation, strategy, aims and causes.
- The appraisal of engagement is represented by the value of social competence and interest.
- The factors of systematic, accurateness and the orderliness all characterise the attitude towards the procedure.
- Concerning business habits, the perception of fairness and a business-like behaviour are valued brand association factors.
- The frequently identified perception of attitude towards work, whereby the willingness to take over responsibility, is particularly valued.
- Another group of identified valued factors are willingness and capability; both are needed for development.

- Another group of factors considers the relationship characteristics and starts by requiring a certain visibility of the supplier brand, consideration of the ownership, the history, the general fit, the distribution of power, the geographical proximity and generally valuing a pleasant relationship and familiarity. Certain attitude aspects such as the perceived engagement also form the relationship.

These are not dominating factors during the multiple case study and are not directly mentioned in the considered literature. Nevertheless, these factors are believed to represent valuable supplementary factors that need to be considered as either supporting factors or that possibly represent the main case specific factors; see Cases 1, 2, 3 and 4.

Apart from the variety of brand association factors, the identified brand association categories (see Section 4.1.6) are believed to offer a reasonable basis on which to identify case-specific factors that resonate with the respective customer values. Apart from the main brand association factors identified, the variability of the valued factors is influenced by the specificity of the purchase and the individual case-specific context (see Sections 5.4 & 5.5). The identified brand association categories open a new perspective on how to look at the composition of brand assets in an industrial B2B context. As described in Section 2.3.6, the current categorisation approaches of the existing literature appear not to grasp the comprehensive aspect of a brand and do not completely describe the different aspects of an overall bracket of all activities of a company, but merely describe the different activities. On the other hand, the identified categories of assets are reflected in all activities of the supplier brand and therefore represent a holistic characterisation of customer-based brand equity.

One of the main brand assets is the perceived **knowledge** of a supplier brand. In particular, the technical knowledge is frequently valued throughout the business relationship. The know-how about processes and how to approach tasks in an industrial context are also valued. As mentioned, some authors (Bausback, 2007; Beverland, Napoli, & Yakimova, 2007; Herbst & Merz, 2011; Mudambi et al., 1997; Persson, 2010) also describe the relevance of knowledge by defining the aspects of advice, experience, having expertise and being intelligent and educated as relevant factors. Sedaghati (2012) even states developing a knowledge management system and using a talent management system to promote brand equity. Srivastava & Mookerjee (2004) also state that the perceived expertise, the approval of experts and the perceived satisfaction of existing customers

foster brand equity. Furthermore, knowledge is generally recognised as a valuable asset and businesses are increasingly drawing on external knowledge (Van de Vrande et al., 2009). Nonetheless, none of the considered literature describes the perceived knowledge as a central brand asset.

The second asset is the perceived **capabilities** of a supplier brand. The term capabilities is also used as a separate factor in this research project and is also listed as a separate factor by Leek & Christodoulides (2012). In the context of a factor in relation to this research project, the term is used to describe the fit, the efficiency, general production performances, services around the main offering and the ability to execute. On the other hand, the term capability represents a good definition for the second brand asset, as several of the identified factors in this research project (see appendix E) are seen to be perfectly represented by the asset capability. The relevance of the capabilities is supported by Beverland, Napoli & Lindgreen (2007) and Zhang et al. (2015). Zhang et al. (2015) also recognise the relevance and comprehensive nature of capabilities and state that the marketing, the networking and the innovation capability of a brand has a positive influence on the brand equity. As a matter of fact, many of the identified factors of other existing literature can be allotted to the capability category.

For example, the system usability, simplicity, flexibility and the system reliability listed by Kuhn et al. (2008, p. 48) and the perceived assortment, innovation, total solution, reliable speedy deliveries and the ease of ordering defined by Persson (2010) all describe favourable capabilities. The precision of load bearing, the stated availability and the global coverage defined by Mudambi et al. (1997) and most of the functional values (for example, the factor technology, the capacity, the perceived infrastructure and the innovation) defined by Leek & Christodoulides (2012) are seen to be represented by the term capability. As Beverland, Napoli & Lindgreen (2007) discovered by analysing the agribusiness, the B2B segment has a strong emphasis on capabilities.

In total, the capability range starts from the perceived solutions and performances and extends to include product quality, the compatibility and usability, the technology, the ability of the offered services, the distribution performance, the reliability of the setup system, the price/performance and the ability of the involved staff (for example, the salesperson's ability to understand the requirements). Furthermore, capability is a feature,

faculty or process through which competences can be applied and exploited (Vincent, 2008).

Therefore, capability represents a potential with which an outstanding output can be achieved; knowledge is one of the ingredients that form the capability. A further ingredient is the **attitude**. The capability to offer flexibility, reliability, ease of ordering (Mudambi et al., 1997; Persson, 2010) or the general ease of operation (Bendixen et al., 2004) is not defined by the implemented system or the organisation, since the best system and organisation is limited by the attitude of the entity. A large percentage of the identified factors describe a favourable attitude. The buying centre members are aware of this interrelation and appreciate an appropriate attitude. One of the purchasing functions in Case 1 stated *“that even though a task may not have been realised, it is appreciated to see that the supplier brand showed the willingness to do so”* (Purchasing “P” Case 1, interview, 7 January 2012). The quality management business function of Case 1 also mentioned the value of perceiving effort to solve the issue (Quality management “Q” Case 1, interview, 5 July 2012). This willingness and other factors such as the perceived interest, clarity, transparency and accurateness establish the brand’s attitude, which is the third brand association asset.

Further factors such as honesty and social competence are seen to partly describe a valued brand personality. The comments of one of the purchasing functions in Case 4 are noticeable: *“...mistakes, which are admitted, can be solved...counterpart needs to be able to handle provocation...”* (Purchasing, “PM” Case 4, interview, 18 December 2012). One of the purchasing functions of Case 1 mentioned the value of feeling welcome through the comment *“...it’s about the tone...”* (Purchasing “HP” Case 1, interview, 25 July 2012). In some cases, as for the term reliability, the line between capability, attitude and brand personality seems to be very fine. Herbst & Merz (2011), for example, list reliability as a brand personality aspect, which can also be seen as a tangible capability or a perceived attitude as the promised statements are directly judged (Bendixen et al., 2004).

Herbst & Merz (2011) list honesty and the factors such as proper, careful and the aspect of being charming as relevant brand personality aspects, which can also be seen as aspects of social competence. Although most of the identified factors in this research project are seen to describe a favourable attitude, it is acknowledged that the ideal attitude is most

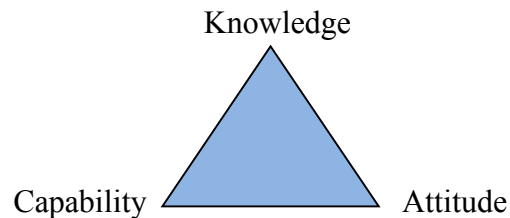
possibly represented by an ideal brand personality and the identification of attitude factors is recognised to be a result of the accomplished research method. On the other side the number of attitudinal factors discloses that these factors resonate in the minds of customers. This is assumed to be due to its immediate and greater influence on the actual required performance of the supplier brand. The relevance of the attitude is also described by Sarin (2014), who visualises the influence of attitude on the experience with the brand. In addition, Punjaisri & Wilson (2007) comment on the relevance of the employees' attitude towards delivering the brand promise. In the end it is about the resulting behaviour, which influences the customer's perception (Baumgarth & Binckebanck, 2011).

Attitude represents the last of the three main identified assets of customer-based brand equity in an industrial context. The frequently perceived and valued factors throughout the business relationship nourish the asset of either knowledge, capability or attitude. From the business relationship perspective, the product functionality and the interrelated quality appear to be important factors; on the other hand, the perception of product functionality appears to be a limited partition of the business relationship.

The buying centre focuses their attention on the knowledge, capability and attitude of the supplier brand. On the other hand, favourable knowledge, capability and attitude are the determining elements of product functionality and quality.

Furthermore, the delivery of detailed technical specifications, which is identified as a valued factor (Cases 2, 3 & 4) and also identified by Bausback (2007), presumes an open attitude. The content of the delivered information will most possibly represent the knowledge, capability and attitude of the supplier brand.

These described assets (Figure 23) form a bracket over all activities of a company and are seen to embrace the holistic nature of a brand. These identified assets are clearly derived from the customer's experiences and are therefore believed to capture the main brand equity from the customer's viewpoint.



Author's own construction

Figure 23: Identified and affirmed brand assets

A further aspect is the degree of loyalty towards a brand, which represents the highest stage of brand equity. In respect to the relationship, the multiple case study identified that in some cases the perception of partnership is an explicitly valued factor, which has also been identified by Kuhn (2008). The characteristics of a potential partnership are assessed already in an early stage of the business relationship and personal relationships are valued (Borghini & Cova, 2006). The findings show that the value of relational aspects can lead to the buying centre members assigning relational factors to the corporate brand. For example: “...*source of pleasure*...” (Engineering “E” Case 1, interview, 2 February 2012), “... *humanly open*...” (Purchasing “HP” Case 1, interview, 25 July 2012), “...*knowledgeable salesperson*...” (Engineering “EPS” Case 2, interview, 11 August 2012; Engineering “EPH” Case 2, interview, 13 August 2012). These aspects and further characteristics of the relationship are discussed in the following section.

5.2 The phases and the influencing factors during the business relationship

The touchpoints identified in the minds of the buying centre members and the underlying motivation and status of relationship activity in the discussed phases are evaluated. The phases represent a practical classification, which helps in understanding the business relationship process from a customer's perspective. Some similarities are found in the existing literature; nevertheless, the degree of detail and the identified phase-related brand association factors offer a much more differentiated perspective and insights into the development of a relationship in an industrial context.

The first phase is defined as the **pre-contact phase**. During this phase the customer has no instant intention of finding a new supplier; however, they are receiving brand information or are even directly contacted by the supplier. This particular phase is not explicitly described by current literature. Consistent with this gap, the number of identified touchpoints is also relatively low. Only five touchpoints by five buying centre

members are identified during this phase. On the other hand, the first perception of a brand is formed during the acquisition call from the salesperson or through an independent respected source. Bendixen et al. (2004) also identified salespeople and experts as the two most influential sources for creating brand awareness. Moreover, previous research has shown that brand is particularly relevant during a new purchase (C Homburg et al., 2007; M. Richter, 2007). The focus during this phase lies on the perception of potential solutions and the competence of the brand.

The next phase is the **evaluation phase**, which describes the phase where the customer is actively looking for potential suppliers and accomplishes a first selection. As Ford (2002b) describes, the customer takes over an active role during this process to find potential suppliers. In the defined phases of Ford (1980), the described pre-relationship phase seems to largely correspond with the identified evaluation phase. H. P. Richter (2001) describes this phase as the information phase. Another congruent aspect to Ford (1980) is the finding that the evaluation phase is preconditioned by the experience with previous suppliers. In three of the four cases, one to two buying centre members mentioned that personally known supplier brands are considered first. Moreover, the findings also disclose that some of the buying centre members value a relationship with competent social staff. This observation is sensible since the uncertainty is smaller when there is familiarity with the way of working, the norms and values and the knowledge about the technological compatibility (Ford, 1980). Kotler & Pfoertsch (2006) list some congruent touchpoints (for example, trade shows, the homepage and word-of-mouth) that occur during a pre-selection phase. Advertising or promotion may influence a certain pre-selection phase, but does not have much influence during the evaluation phase. The homepage has the most influence on the customer's perception and it is important that the homepage appear through a Google search. As identified by Kotler & Pfoertsch (2006), word-of-mouth communication is a relevant vehicle. The buying centre actively contacts their own network and uses the network of colleagues to identify potential suppliers. This confirms the statement of Mäläskä et al. (2011) who acknowledge that the ambient network influences brand equity and activities need to be coordinated to enhance brand equity. According to the number of identified touchpoints and the rating of these points, the evaluation phase is on the one hand a very influential phase in generating awareness and on the other hand has a high influence on the image perception. The focus lies on the perception of capabilities.

The **clarification phase** is the most influential phase and includes a clarification of the requirements, possibly some test, a specification of the performance and the offer and negotiation (H. P. Richter, 2001). Ford (1980) describes this phase as the early stage and points out that the buying centre is somewhat in conflict as the invested time stands in conflict to the maybe few cost savings. This statement of Ford (1980) confirms the identified relevance of reaction time during this phase. The most influential factors during this phase are the perceived competence and the understanding of the requirements. The price/performance, openness and the product functionality are also influential. These factors are in line with the concerns described by Ford (1980). Corresponding to Srivastava & Mookerjee (2004), competence is an influential factor during this initial purchasing phase. In relation to the time investment and the high uncertainty during this phase (Ford, 1980), the buying centre appears to value the perception of understanding of requirements, price/performance, openness, product functionality, reaction time, availability, interest and responsiveness, which reduce technological, time and cultural uncertainties and allows a judgement of the commitment of the opposite side.

The **survey phase** appears in three of the four cases; in Case 3 only the management business function mentioned this aspect. The influence of this phase therefore seems to be case dependent. According to the results of this multiple case study, the relevance of the survey of the supplier's facility is dependent on the characteristics of the purchased performance and the characteristics of the customer's organisation. If accomplished, this phase widens the spectrum of aspects and sources the customer is able to perceive; the orderliness and the perceived reliability are the main factors. Nonetheless, competence is again the leading factor; the capability and the perceived systematic are also valued factors.

The classification of a survey phase and the subsequent foreplay and the delivery phases are not found in the considered literature. Nevertheless, Ford's (1980) described development stage seems to include the foreplay phase, the delivery phase, proof of credit and the beginning of the relationship phase. Kotler & Pfoertsch (2006) also have a somewhat broad division of the phases, but hint on the defined subdivision by listing the service and delivery, the packaging, the product performance, the technical support and the innovation as occasions throughout the brand customer relationship. Therefore, the topics are addressed by the current literature, but are not elaborated on from a relationship process perspective.

The **survey phase** deserves separate attention since the supplier brand possibly reveals trusted data and the customer perceives information through sources that are otherwise inaccessible. The deviation into the **foreplay phase** seems sensible, since the first operative interaction between the two parties occur during this phase and the first promises need to be executed and values confirmed (Ballantyne & Aitken, 2007). During this phase the purchasing business function is mainly involved and values competence and product functionality. It is the first time where the reliability becomes an experienced aspect and the buying centre values speed and flexibility towards requests.

The **delivery phase** stands for the first delivery in which the reliability, product functionality and simplicity are the main valued factors. The involvement of the buying centre during this phase varies depending on the case, which is dependent on the scope of the tasks of the buying centre members and the size of the company. Although the first delivery can be seen as a major event, the number of identified touchpoints and the rating of the buying centre members dampen the relevance. This is explained by the fact that the buying centre members are barely confronted with the delivery and the integration of the delivered component. Nonetheless, the expectations generated through previous perceptions are confirmed, exceeded or disappointed during this phase (Ballantyne & Aitken, 2007).

The next influential phase is defined by the occasion of first quality or delivery problems or support requests. This phase is then also defined as the **proof of credit phase**, where the customer perceives the supplier's reaction during a challenge. The statements of the buying centre members refer less to quality issues than to how the supplier attends to solving the issue. The main value focuses on the attitude towards the solution orientation, the perceived openness, the competence and the honesty. The cross analysis discloses increased influence on the buying centre's perception during this phase, which affirms the value of a service-dominant logic described by Ballantyne & Aitken (2007).

The **relationship phase**, which Ford (1980) defines as the final stage, describes the phase with the highest relationship intensity. During this phase, the buying centre values customer orientation, openness, partnership and continuity. In addition, the willingness to learn, solutions for upcoming requests are valued and the strategic fit is followed. The intensity of the relationship appears to depend on the visual contribution of the customer's

communicated added value and not only on the integrated added value (Caspar et al., 2002). Nonetheless, in three of the cases a close relationship appears to be appreciated and based on the cross analysis this phase has a relatively high influence on the buying centre's perception. Persson (2010) and Mudambi & Chitturi (2010) also state the relevance of partnership and co-operation. During this stage, the perceived attitude becomes a higher relative influence compared to the knowledge or capability associations. In agreement with Kuhn et al. (2008), the customer values partnership and solutions for their needs. Attitude appears to have a leading influence. The buying centre members who have a high interactivity value personal relationships with competent staff and will even assign these relational values to the corporate brand. After a while an extensive institutionalisation of a business relationship can lead to a strong co-operation or also lead to a conflict if the relationship is not carefully maintained (IMP-Group, 2002).

A conflict can lead to a **termination of the business**, which should be accomplished in a mature and business-like way. Some of the buying centre members stated that a business relationship could always be reactivated. This was the view of members in Case 1 (Engineering "E" Case 1, interview, 2 February 2012; Purchasing "HP" Case 1, interview, 25 July 2012) and Case 4 (Engineering "HE" Case 4, interview, 18 December 2012). Further, it needs to be considered that the surrounding network will possibly perceive the approach to a termination (Mäläskä et al., 2011). In addition, the customer is likely to keep the competence, capabilities, product functionality and the attitude in mind.

Kotler & Pfoertsch (2006) state that to assure a consistent brand impression a holistic approach is needed, meaning that every single contact has to be known and managed during the whole process, beginning from the pre-selection to the on-going relationship. The results of the multiple case study enforce this statement; however, the varying influence also indicates that some of the touchpoints and phases should be given higher attention. The identified phases and the interrelated main factors should be considered throughout the business relationship. These phases appear to fit with the basic relationship phases defined by Ford (1980). Nonetheless, the partition is much more refined and has a greater focus on the customer's motivation and the categorisation is based on emerging events, which allow the customer to perceive a further perspective of the supplying brand. See also Table 89.

Table 89: Newly identified relationship characteristics and research outcomes

Identified characteristics	Results
Perception-based business relationship patterns determined by the business process and influential occasions to form opinion.	Eight overall phases defined by the varying perception and upcoming business relationship activities and topics, covering the whole business relationship.
Varying influence on customer perception	Identification of influential phases and process of influence
Varying focus of brand association factors	The focus on capability and competence, which advances to a focus on attitude

The increasing influence during the later phases of the business relationship and the varying focus of influential business associations support Ballantyne and Aitken’s (2007) call to consider the complete business relationship. On the other hand, the focus of the current B2B brand literature appears to lie on the purchasing process, which corresponds to the clarification phase. This is the most influential phase. The service experience during the later business relationship phases confirms or disconfirms the brand values (Ballantyne & Aitken, 2007). Corresponding to Hutt & Speh (2004), the price appears to be frequently unimportant throughout the business relationship. The exploration has identified that the focus of the valued assets appears to alternate during the business relationship. At the beginning the capabilities and competence appear to be more influential and during the later phases the attitude becomes more influential (see Section 4.2.6).

To influence the perception, the common sources and the channels also need to be considered.

5.3 The influencing sources and channels

As described in Section 2.4, the brand association factors are understood to be the communicated message, which is transferred by different sources through different channels. Each touchpoint (see Figure 10 “blue arrows”) consists of these three (source-message-channels) aspects.

The number of identified touchpoints for each case varies between 18 and 29. Based on the cross analysis, the most influential touchpoints for the perception of the buying centre are the survey of the homepage, technical clarification occasions and functionality issues.

The identified 18 sources can be categorised into people's behaviour, marketing performances, opinion formers, external data handling and the customer's opinion. Throughout all four cases, the sales and the engineering business function appeared to be the most frequent perception source.

The influence of the salesperson has been largely recognised (Baumgarth & Binckebanck, 2011; Bendixen et al., 2004; Kuhn et al., 2008); however, the influence of the engineering business function has not been described in the current literature. The engineering business functions have an above average influence. The group of influencing business functions increase during later phases of the business relationship and therefore other individuals also influence the brand's perception (IMP-Group, 2002). As stated by Morhart et al. (2007), employee performance has a superior influence on the perception of the brand and whether the brand is confirmed or not.

According to the results of the accomplished multiple case study, only a few of the buying centre members mentioned touchpoints during the pre-contact phase, which represents the customer's perception of the supplier brand without having an acute need. The perception through trade journals during this phase appears to have a low resonance in mind. Research by Bendixen et al. (2004) showing that mass media has a low impact confirms this finding. Nevertheless, the communication through a respected source seems to have an impact on the awareness. In Case 1, a presentation by the engineer's professor even led to the desire to co-operate with the presented brand (Engineering "E" Case 1, Interview, 2 February, 2012). As described by Bendixen et al. (2004), influential touchpoints occur when an independent technical consultant talks to a potential customer and the word-of-mouth (Kotler & Pfoertsch, 2006) perception of a respected source resides in the mind of the buying centre member.

In contrast to the pre-contact phase, many residing touchpoints accrue during the evaluation phase. This finding indicates that the main brand awareness is generated during an active search for a potential supplier. During the evaluation phase, there are different possible awareness generating occasions, such as trade shows, an individual's network and the survey of the homepage (Kotler & Pfoertsch, 2006) that seem to be the most influential. As mentioned by one of the engineers in Case 2 (Engineering "EPH" Case 2, interview, 13 August, 2012) and by the salesperson in Case 3 (Sales "S" Case 3, interview, 9 September, 2012), the appearance through Google search is mandatory for the supplier

to be considered if they are not already present in the minds of the customer. During the survey of the homepage, the availability of detail information seems to be decisive. The availability of detailed technical information, particularly for standard component purchases, can determine whether the supplier brand is further considered during the evaluation phase.

The influence of the private and business networks of the buying centre is not to be ignored. As Mäläskä et al. (2011) describe, brand equity is influenced by the network. In this exploration, the identified sources include the internal colleagues and personal networks, which the buying centre member develops throughout their professional career. The advice of Mäläskä et al. (2011) to identify the branding pool is therefore supported. On the other hand, the list of possible network participants will have to be extended by considering that the buying centre members are not only influenced by the current network situation. The buying centre brings their own historical experiences from previous jobs and/or working for other organisations in other or similar industries.

During the following and most influential phase, the sales and engineering business functions appear to be the most influential sources. Nonetheless, the product itself is also an influential source, which is being tested and carefully examined. During the survey phase and during the interaction at trade shows or quality issues, the considered range of employees as sources also increases. Furthermore, the survey phase puts the physical evidence into the foreground of perception, which Leek & Christodoulides (2012) also point to by listing the functional brand value “infrastructure”. Needless to say, the marketing performances as the general brand communication and the product also serve as relevant sources. It must also be considered that the customer’s customer occasionally predefines the possible suppliers. Another factor to consider is that the employees and colleagues in the company, indirectly influence the buying centre members, for example management. In addition, the compilation of the buying centre also influences the compilation of the relevant sources.

As concluded in Section 4.2.6, the pattern of sources throughout the relationship leads to the insight that the brand in an industrial context can be seen as a team brand. In the beginning the team stands in the foreground, but during the subsequent phases the team members become more dominant.

In total 14 channels of communication are identified. The most frequent channels are the telephone, email and face-to-face communication. The mind itself, as the storing vehicle, serves as the channel to recall past experience and this stored experience in the mind influences the assessment (Dror, 2005) during the whole business relationship.

The channels can be categorised into written “hardcopy” and electronic media, instant channels, visual, the function of products or any item, symbols and the resonance in the mind. At the beginning of a business relationship one-way channels such as the internet (homepage) and documents seem to be more influential. As the business relationship develops, the channels that enable interactive communication become more relevant, particularly the email, telephone and the face-to-face channels. Therefore, the perception at the beginning can be better prepared and influenced. The interactive channels are influenced by tactic and the characteristics of responsiveness. The performance of the employees will define whether the previous brand promise is confirmed or not (Morhart et al., 2007). The visual appearance and product performance (Bendixen et al., 2004; Leek & Christodoulides, 2012; Persson, 2010) are also determined and confirm the brand promise and serve as channels for influencing brand association factors; even the packaging itself serves as a channel for brand associations (Kotler & Pfoertsch, 2006).

A large number of the identified sources have been identified by previous research. On the other hand, the high relevance of the engineering business functions appears not to be recognised (see Table 90). In addition, the described branding pool by Mäläskä et al. (2011) should be complemented by the historical individual network.

Table 90: Sources and channels –patterns and state of knowledge

Aspect	Represented in literature	Newly discovered
Sources	<ul style="list-style-type: none"> -High relevance of sales -High relevance of independent technical consultant (professor) -High relevance of product -Influence of employees/departments -Influence of network -Influence of brand communication -Influence of physical evidence -Influence of organisation -Influence of accuracy of delivery 	<ul style="list-style-type: none"> -High relevance of engineering -Historical individual network
Channels	<ul style="list-style-type: none"> -Relevance of internet -Low relevance of trade journals -Relevance of packaging -Relevance of product performance -Relevance of diverse documents 	<ul style="list-style-type: none"> -High relevance of homepage -Relevance of study books -Relevance of catalogue -Relevance of email -Relevance of telephone -Relevance of ERP system -Relevance of visual appearance
Patterns	<ul style="list-style-type: none"> -Interactivity 	<ul style="list-style-type: none"> - Progress from one-way communication to interactivity -Perception of a team brand

As no academic work has yet systematically explored the relevant channels, a large number of the identified channels are not reflected in the existing literature. The identified relevance of the homepage seems to be caused by its accessibility (24/7 and for everyone) and its usage as an information resource. The interactive nature of the business-to-business relationship has been identified and described (Ford, 2002b; Hutt & Speh, 2004). The findings of this exploration show that the business relationship starts with perception that is gained through one-way communication and then develops to an interactive relationship. A new emergent finding is that the B2B brand can be characterised by a team brand and the perception appears to be somewhat similar to a soccer team (see Section 4.2.6).

Influenced by the sources and channels, three main business functions are found to be the frequent receivers: the engineering, the purchasing and the management business functions.

5.4 The business function perspectives

As described by Backhaus & Voeth (2014), it is crucial to know the function of the buying centre member. Besides the official job title, the individual's area of responsibility needs to be considered to fully understand the perspective. The job function gives an indication of what the member is responsible for (Backhaus & Voeth, 2014). According to the findings, the area of responsibility is influenced by the organisation's distribution of

duties, which increases with the size of the company and is influenced by the individual career path within the company. This individual experience and case-specific overlap of responsibilities result in a high variability between the buying centre members and the cases. Nevertheless, the findings demonstrate a focus of the different business function perspectives, which are attributable to the official job title and reflect the main duties of the business functions.

Throughout the multiple case study, three main business functions occur. The identified main business functions engineering, purchasing and management largely fit with Lilien & Wong's (1984) description of a buying centre. Garrido-Samaniego & Gutiérrez-Cillán (2004) also identify that the engineering, the purchasing and the management have a major influence on the purchase decision. Unlike Garrido-Samaniego & Gutiérrez-Cillán (2004), the manufacturing business function in this study did not have a main influencing role in the four selected cases. The purchasing function in Case 3 has a dual role and is also responsible for the production. For the moment, no explanation for this discrepancy is found; on the other hand, as found in Cases 3 and 2, the composition can vary and, according to Hutt & Speh (2004), the buying centre is normally not institutionalised.

The identified business function perspectives are evaluated from the touchpoints and the corresponding experiences and explanations that reside in the mind of the buying centre member. The described business function perspective therefore does not represent a complete picture of all occasions and general procedures, but rather a consolidated imprint of the resonating factors.

The difference in perspective is found in the peculiarity of the resonating touchpoints and the rating of these touchpoints. On the other hand the business function-specific brand association factors are identified. Several brand association factors are valued by all three business functions.

The connecting perspective is represented by the value of competence, solutions, understanding of requirements, openness, the product and the price/performance. Therefore the finding of Herbst & Merz (2011) that the business functions generally value similar brand performance aspects is affirmed. All three business functions value the technical competence, understanding of requirements and openness, but also have some business function-specific values concerning the competence in procedures. The

engineering perceives the competence to develop a technical solution while the purchasing is interested in the competence concerning purchasing procedures. The overlapping emphasis on competence is also reflected in the results of Herbst & Merz (2011), who identified an overall perception of the performance personality category (see Table 10).

The engineering emphasises detail information and reaction time. The purchasing seems to particularly value flexibility, accurateness, honesty, proximity and partnership. The purchasing business function is not found to have a particular emphasis on experience and advice, as described by Bausback (2007). The management particularly values transparency, which is compatible with the found focus on credibility factors stated by Herbst & Merz (2011).

The findings show that the business functions value particular factors, which serve to achieve the business function's specific tasks (see Section 4.3.4). The characteristics of the purchaser seems to have some influence on the purchasing perception (Mudambi, 2002). In Case 1, the leadership role of one of the purchasing business functions influenced the interest in face-to-face interaction. The operative business function focuses more on delivery touchpoints. This pattern re-emerges in Case 4, as the head of the engineering team also shows a relatively high interest in face-to-face interaction. In agreement with Keller and Webster (2004), the buying centre members emphasise different aspects in relation to their role in the organisation. On the other hand, this role appears to be influenced by the business function, the executive position and the individual history within the company. These aspects form the case-specific range of tasks of the business function. For example, the engineering in Cases 2 and 3 have an extraordinary interest in attitudinal factors due to their purchasing activities.

When a business function is successful, the business function is most possibly honoured by the organisation and is perceived as a good employee (Kotler & Pfoertsch, 2006). The engineer is concerned with optimising the technical decision process and does not want to lose time by getting involved with unsuitable suppliers. Therefore, the engineering emphasises a supplier brand with an open attitude, which offers direct access to detailed information and reacts immediately to enquiries. It must be considered that the engineering business function's involvement depends on the type of purchase (Anderson et al., 2009; Backhaus & Voeth, 2014), such as the novelty of the technological

application (Engineering “E” Case 1, interview, 2 February 2012). The purchasing is particularly concerned about attributes, which determine the future relationship and prefers a supplier brand that is nearby and has the ability to react to unforeseen events. Moreover, the business function whose interactivity is high develops relational values that they even allot to the corporate brand.

Based on the finding that the business functions emphasise factors that serve to accomplish specific business function tasks and case-specific range of tasks, the results point out that the buying centre members are also trying to optimise their own specific areas of responsibility. Therefore, it can be derived that the business function values brands that convey factors that serve to optimise the business function’s tasks. The decision and the resulting business function-specific performance is judged by others in the organisation (Keller & Webster, 2004) and possibly also influences the self-perception (Kotler & Pfoertsch, 2006). This effect is believed to result in a self-image benefit and loyalty to an individual brand. Due to this business function-specific effect, the individual buying centre member does not only profit from the current situation at the current employer, but also the buying centre member profits by taking this experience to the next employer and is able to profile his own capabilities in the particular business function.

To ensure this business function specific effect, the business function’s specific emphasis on particular touchpoints needs to be considered. The engineering is particularly sensitive during the technical clarification and the sample test. The purchasing is particularly sensitive when receiving the offer, visiting the supplier’s facility and during the price negotiation. The management interest represents a mix of the purchasing and the engineering perspectives; nonetheless, is particularly sensitive when a product failure occurs. In addition, the visit of the supplier and the visit to the supplier’s facility seem to resonate in the mind of the management. The business function’s specific touchpoints also correspond to the business function’s specific tasks. The findings show that an executive position fosters the value of interactive touchpoints and that the case-specific range of tasks influences the resonance of touchpoints in the mind. For example, the engineering of Case 2 takes over purchasing tasks, the sales function of Case 3 screens possible suppliers and in Case 4 with the more distributed tasks, communication is channelled through the purchasing function. In contrast, the purchasing in Case 3 has a reduced range of purchasing tasks. The extraordinary involvement of the finance and the

sales business functions in Case 3 lead to the consideration of extending the area of touchpoints. Apart from the business function- and case-specific touchpoints, the survey of the homepage appears to be of general relevance.

As recommended by Keller and Webster (2004), the basic value proposition needs to have relevance for all players. The common valued brand association factors are competence, solutions, understanding of requirements, openness, product and a good price/performance ratio. Therefore, the main common factors focus on the perceived knowledge and the capability category and do not particularly address the emotional and self-expressive values as Moorthi (2004) recommends. Nonetheless, the business function-specific brand associations focus more on attitudinal or relational aspects and the possibility to distinguish oneself in the assigned business function speaks rather for applying self-expressive values.

The following Table 91 shows which identified aspects confirm current knowledge and which patterns are found to contribute to knowledge.

Table 91: Business function perspectives –patterns and state of knowledge

Aspect	Represented in literature	Newly discovered
Engineering	-	Factors: Detail information, reaction time Touchpoints: Technical clarification and sample test
Purchasing	-	Factors: Flexibility, accurateness, honesty, partnership, proximity Touchpoints: Offer, visiting the supplier's facility, price negotiation
Management	-Credibility (transparency)	Touchpoints: Product failure, visit of the supplier, visit to the supplier's facility
Patterns	-Perspective is influenced by business function and role	-Influence of business function empirically confirmed -Influence of area of responsibility
	-Overlapping emphasis on competence -Common value of brand performance factors -Relevance of self-image benefit -Influence as organisation observes buying centre	-Varying view of competence -Additional common factors: Understanding of requirements, openness -Affirmation of self-image relevance through empirical findings -Overlapping factors focus on knowledge and capability -Emotional & self-expressive factors are related to business function
	-	Relevance of homepage

According to these findings, it is recommended that the business function's perspectives—which are formed by the case-specific range of tasks (Keller & Webster, 2004)—be considered. By considering these individual perspectives, the business

function's specific self-image is addressed. The resulting brand loyalty is not only attached to the current buying centre or company context, but is also a developed loyalty towards the individual buying centre member. This relation also explains the recognised value of personal relationships (Bendixen et al., 2004; Borghini & Cova, 2006; Kuhn et al., 2008). The exploration has confirmed the influence of the business function and its varying perspectives. The business function's range of tasks appear to be case specific and the leading role can also have an influence, which means that the area of responsibility is the more precise definition for the allocation. In addition, the results of the exploration suggest that competence, understanding of requirements and openness are also of general value and the homepage, with its identified overlapping relevance, is a good channel for communication. On the other hand, knowledge and capability factors are more suitable as comprehensive factors and self-expressive and emotional factors are found to be more appropriate to address the business function's perspective. Some business specific factors and touchpoints have been identified.

Besides the perspectives of the business function, some context-specific aspects influence the perception of the supplier brand.

5.5 Contextual influences

As described in Section 3.4.6, the analysed cases vary by the degree of specificity of the main purchased items, vary in the size of the organisation and the field of business. The specificity of the purchase appears to influence the characteristics of the valued brand associations and influences the degree of relationship intensity and the relevant touchpoints. In addition, the size and the field of business of the customer's organisation have an influence on the degree of relationship intensity and the relevant touchpoints.

The three companies, which purchase mainly standard goods, have a similar focus concerning the valued brand association factors. All three have a strong focus on the factors of continuity, customer orientation and clarity. The factors identified seem closest to those identified by Mudambi et al. (1997), which seems sensible in that bearings can be treated as standard products (see also Section 2.3.2). This focus is explained by the nature of purchasing standard products. As the buying centre is dependent on a specific performance of the standard product portfolio, the buying centre values a certain continuity and clarity about the future development of the portfolio and desires a customer orientation attitude in the actions and decisions taken. On the other hand, these aspects

appear to not be an issue when purchasing highly integrated customer-specific components. With the exception of the strong emphasis on competence, the identified factors in Case 1 correspond largely with the identified factors of Persson (2010) who also looked at valued factors in the customised component supply business (see Section 2.3.2).

A further difference is found in the interest in the supplier's facility and the intensity of the relationship phase. Both the interest in the facility and the intensity of the relationship phase are driven by the relevance for the value creation. However, the causing context can be different. In case 1 the high integration and customisation of the components are the driving forces. As described by Backhaus & Voeth (2014), both parties have invested in the business and a certain dependence is created, which the suppliers in Cases 2, 3 and 4 have not undertaken. A further explanation lies in the high value contribution of the supplier of the customised components (Caspar et al., 2002). In case 4 the high value contribution of process optimisation between the two parties when purchasing high volumes is seen to drive the valued relationship intensity. The large organisation in case 4 also has the needed resources to optimise the process. The other driving factor that influences the intensity of the business relationship is the difference in market appearance. The company in Case 2, a solution provider, has the least interest in a close relationship, which is explained by the accomplished market communication. The company in case 2 places itself as a solution provider, which designs solutions with standard products. Therefore, the company in Case 2 does not itself rely on any specific performance and the company can also distance itself in the event of product failure. In Case 3 the standard products are integrated into the machine that is sold under the brand of the company in Case 3. This means that a bad performance will fall directly back to the image of the company brand, which will have to be justified (Mudambi et al., 1997). This finding also discloses the effect of the added value. Nonetheless, the effect is not found in the direct added value of the supply chain, but rather in the contribution of the customer's communicated performance. In addition, the effect in case 4 lies in the perceived added value contribution of joint interworking.

Therefore the statement of Caspar et al. (2002) that the supplying brand's contribution of value influences the perception of the customer is upheld. Nonetheless, it is either influenced by the characteristics of the purchased value, the high volumes of a large organisation or how the value is delimited towards the presented own added value in the

market. The customer's perception is influenced by the own business context and not only by the purchase context (see Table 92).

Table 92: Contextual influence –patterns and state of knowledge

Aspect	Represented in literature	Newly discovered
Business context	-Influence of product market/business types -Influence of added value	-Influence of customer's own business context -Specificity dependent valued factors
Corporate	-Size	-Distribution of tasks results in higher variety of perception between the business functions
Relationship	-Influence of specificity on relationship intensity	-Influence of added value share on customer's communicated added value -Influence of added value contribution through joint interworking

As indicated by Caspar et al. (2002), the product market segment influences the perspective. In particular, the valued factors differ by the degree of specificity of the purchased item. Additionally, the environment appears to influence the perception (M. Richter, 2007). Brands selling standard products are perceived differently in comparison to brands that offer customised solutions.

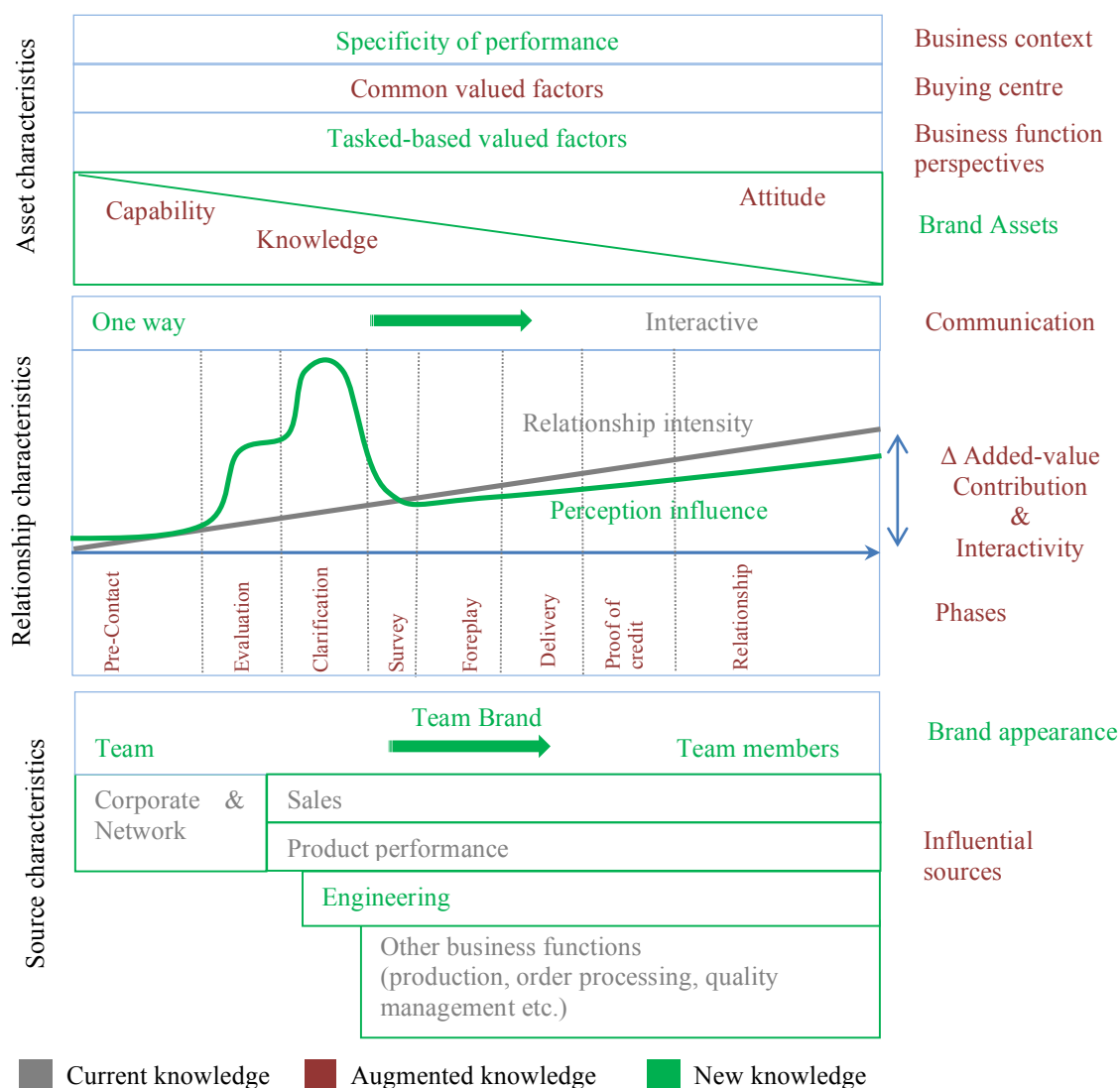
A further influencing aspect is the size of the customer's corporation (M. Richter, 2007). As much as the brand can have a harmonizing effect (Wünsche, 2010), the valued brand association factors of the involved business functions appear to be more specific, which appears to be influenced by the distribution of tasks of a larger organisation. The organisation and the individual's history within the organisation influence the variability of the valued brand associations. On the other hand, the influence of the customer's corporate values (M. Richter, 2007) only partly match with the identified brand association factors. The stated values of case 1 match with the identified brand association factors of innovation and know-how and in case 3 the values also fit with the main brand associations.

Based on the previous discussion and context-specific points, the following section describes the derivation of the elaborated framework.

5.6 Derivation of a customer-based brand equity framework and model

As described in Section 2.4, the underlying framework of customer-based brand equity is characterised by two aspects. The power of a brand is determined by the experiences over time and what resides in the mind of the customer (Keller, 2013). In addition, a brand is

seen to form a bracket over all activities of a company (Brandes & Biesalski, 2010). From this premise, an elaborated framework needs to visualise the main resonating determinants in the mind of the customer, but also help understand the customer's perception over time. A determining impact lies in the business context (♦). Caspar et al. (2002) identifies the influence on the basis of the different product markets. The results of this multiple case analysis suggests that a focus on particular brand asset characteristics (combination of brand association factors) is explained by the general specificity (♦) of the purchased items (see Figure 24).



Author's own construction

Figure 24: Elaborated customer-based brand equity framework

The general B2B marketing literature describes the dependence of the specificity on the intensity of the business relationship (H. P. Richter, 2001). Nonetheless, the branding

literature has not addressed this relation nor identified particular brand association factors. A further identified contextual influence lies in the added value contribution (Caspar et al., 2002). On the other hand, the findings show that influence goes beyond the purchased value as the contribution of a potential joint interwork and the contribution towards the customer's own market performance influence the valued relationship intensity (♦). The current literature has identified some variety in the valued brand association factors (Bausback, 2007; Herbst & Merz, 2011). Analyses of the subunits disclose further business function-specific factors and common valued factors (♦). The common valued brand association factors appear to be competence, solutions, understanding of requirements, openness, product and a good price/performance ratio (♦). The focus of the exploration has allowed the recognition of high variability within the cases and comparable business functions, which is influenced by the case-specific range of tasks (♦). The findings show that there are business function-specific brand association factors; however, the executive position and the individual history also influence the range of tasks and therefore the composition of the valued brand association factors. Furthermore, the results of the exploration also derive that the business function-specific factors influence the self-image (♦). Based on these findings, mainly knowledge and capability factors are commonly valued and the business function-specific factors appear more suitable for addressing self-image, which is found to be contradictory to the recommendation of Moorthi (2004) (♦).

Although literature talks about an interactive relationship (Ford, 2002b; Hutt & Speh, 2004) in a B2B context, the first perception generally starts by acknowledging the brand as a team and the communication at the beginning is mainly a one-way communication from supplier brand or the network to customer (♦). Throughout the process the business relationship becomes increasingly interactive and the perception develops to acknowledgement of the team members (♦). Those buying centre members who maintain particularly high interactivity with these team members value the relationship intensity and even develop relational values, which they also attribute to the corporate brand. The exploration discloses that the brand in a B2B context can be described as a team brand (♦). The buying centre acknowledges the corporate brand as a bracket for the team and its members, which is required to fulfil their needs. Next to the sales (Baumgarth & Binckebanck, 2011; Bendixen et al., 2004; Kuhn et al., 2008), the influence of the network (Mäläskä et al., 2011), the product performance (Bendixen et al., 2004; Leek &

Christodoulides, 2012; Persson, 2010) and the other employees (Morhart et al., 2007), particularly the engineering business function (◆), needs to be considered.

The identified phases are believed to represent a practical classification to help understand the business relationship process from a customer's perspective. The identified phase-related brand association factors have allowed insights to be derived about the relationship characteristics and the procedure of perception. These phases appear to fit with the basic relationship phases defined by Ford (1980) and include the purchasing phases of H. P. Richter (2001). Nonetheless, the partition is more refined and has a greater focus on the customer's motivation. The categorisation is based on emerging events, which allow the customer to perceive a further perspective of the supplying brand (◆). The rating of the identified touchpoints discloses that the influence on the perception increases during the evaluation phase and reaches its peak during the first main interaction, the clarification phase (◆). As the interaction grows and the relationship intensity increases, the influence of the touchpoints on the perception drops (◆). Nevertheless, it starts to increase again during further phases. Therefore, the main picture of the supplier brand is formed during the first interaction and as the interaction increases, the influence on the perception goes up again (◆). This curve of influence stands for the impact of differentiation. On the other side, a below-average performance (for example, a basic product functionality) will have an extraordinary effect during any phase of the relationship.

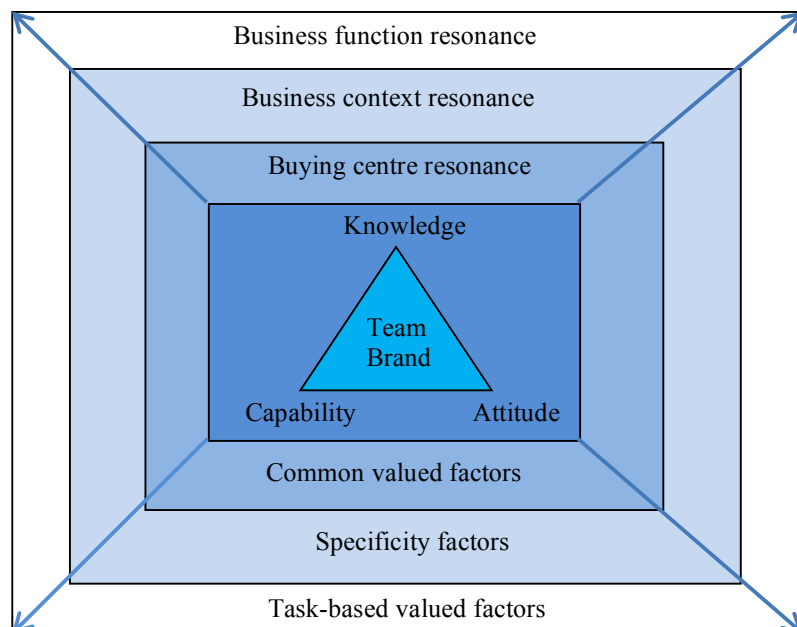
The perceived brand association factors are found to have an underlying pattern of categories, which are suggested to represent three main assets (◆) of customer-based brand equity. A frequently identified theme is the value of knowledge and has been recognised by other authors (Bausback, 2007; Beverland, Napoli, & Yakimova, 2007; Herbst & Merz, 2011; Mudambi et al., 1997; Persson, 2010). The next aspect with a large variety of brand association factors is the asset of capability, which Leek & Christodoulides (2012), Beverland, Napoli & Lindgreen (2007) and Zhang et al. (2015) also state to be a valued topic. The third asset is defined by the attitude, which Sarin (2014) and Punjaisri & Wilson (2007) also describe as an influential topic. Therefore, the identified patterns are confirmed by the current literature and the various identified factors of existing literature are seen to be assignable to these suggested categories of assets. The business marketing literature supports the relevance of two of the main assets by stating

that the companies are increasingly dependent on the abilities of their network (Ford, 2002a) and emphasise knowledge (Håkansson & Johanson, 2002).

A noticeable and so-far unrevealed pattern is that the capability and knowledge assets are seen to be more influential during the beginning of the business relationship and the attitudinal factors become more influential during the later phases (♦). Besides the basic need for brand awareness and the aim for brand loyalty, these three areas of value are found to represent strong brand equity assets from the perspective of the customer (♦).

The B2B context values a team brand. The knowledge, the capability and the attitude are resonating assets in the customer's mind, which also have an interrelating effect on each other. Knowledge represents the basic potential, whereby the ability of execution is dependent on the capabilities of the supplier brand. The potential of the existing knowledge and the capability execution are limited by the inherent attitude of the supplier brand.

Each of these three main assets includes a variety of characteristics, wherein the three layers of resonance need to be considered (see Figure 25).



Author's own construction

Figure 25: B2B customer-based brand equity model

The first layer represents the factors that resonate with the complete buying centre. The complementary business context needs to be considered—meaning the degree of specificity of the purchased item—since the focus of valued factors vary on the degree of customisation. The next layer represents the specific business function perspective, which is influenced by the interrelated responsibility and the case-specific tasks of the business functions.

These three layers are all complementary; nevertheless, the layers are seen to have a sequence of priority and all three need to be touched to realise full effect. A differentiation within the common factors influences the general attraction and possibly helps to reach a harmonising effect within the buying centre. The following layer includes factors that are embossed by the degree of customisation, arise through the given business context and have an impact on the perception of the entire buying centre.

By considering the final business function's layer, which needs to address the task-specific factors, the brand image obtains full effect. The degree of consideration and the shaping of the inherent factors influence the self-image of the business function within the company, which in the end influences the business function's entire career opportunities and is believed to result in individual loyalty throughout the borders of the current business context. Moreover, the buying centre member can develop relational values towards the corporate brand. The business functions appear to focus on particular touchpoints to form a picture of the brand.

Therefore, although particular factors address particular layers, all areas are required to create effective customer-based brand equity. Additionally, favourable factors need to include a combination of unique factors in relation to the existing competition or the form needs to be extraordinary (Keller, 2013).

This presented model and the elaborated customer-based brand equity framework describe the central conclusions regarding the characteristics of customer-based brand equity in the relating industrial context. The following chapter describes the conclusions from a more superordinate perspective.

6 CONCLUSIONS AND RECOMMENDATIONS

The first section (Section 6.1) reviews the findings in relation to the research objectives. Section 6.2 reflects on the contribution towards the current understanding. Section 6.3 describes the resulting implications for management. The chapter ends with a discussion of the limitations and recommendations for future research.

6.1 Review of outcomes of the thesis in relation to the research objectives

This section is structured by the four leading objectives of this research project. The main aim of this research is to improve the understanding of the perspectives of the buying centre members on brand equity. Based on the aim of understanding the perspectives of the buying centre members, the second objective is to identify the touchpoints and their sources and channels. The third objective is to identify the brand equity-generating factors in each phase and to identify the brand assets within the B2B context. The final objectives are to present an elaborated framework and to define a customer-based brand equity model.

6.1.1 The brand assets in a B2B context

As explained in Section 2.3.6, no literature has been found that has uncovered any deduced generic brand association subtopics or brand assets. On the other hand, the underlying pattern of the 83 identified brand association factors discloses that the knowledge, the capability and the perceived attitude represent three strong brand assets. These three aspects have been mentioned by current B2B branding literature; however, have not been recognised as central brand assets. The characteristics vary depending on the specificity of the purchase and the business function's range of tasks. Some common valued factors have been identified.

The 83 identified brand association factors, from a comprehensive viewpoint, are represented in the listed subtopics of the reviewed brand equity concepts of Aaker (1996), Kapferer (2012) and Keller (2013) (see in Table 3). The brand equity concepts defined by Aaker (1996), Kapferer (2012) and Keller (2013) therefore seem to also consider the industrial context. The difference lies in the focus, the compilation and the relationship characteristics. The brand reputation, the perceived brand values and the brand performances seem to be of particular focus.

Corresponding to Keller's pyramid (2001), the base is formed by the awareness. The subsequent phase is formed from the perception of the brand's performance (capability). The focus for the brand imagery aspect in the investigated industrial context is on the perception of competence (knowledge), which Kuhn et al. (2008) integrated by placing the brand reputation as the main aspect during this phase. As described by Keller (2013), the performance is judged by the customer. Kuhn et al. (2008) state that the sales force is a very influential source. Nevertheless, it needs to be considered that the engineer has an even impact, particularly during the judgement of the brand's performance. In contrast to the findings of Kuhn et al. (2008), the customer reacts emotionally, perceives the honesty and wants to feel safe. Further, the value of a particular attitude becomes more important throughout the relationship (which indicates the emotional reaction) and particularly during the proof of credit phase when the customer judges the supplier brand and values safety. As visualised (see Figure 24), brand reputation and performance dominate at the beginning of the relationship; however, the brand's attitude becomes increasingly relevant during the process. The brand resonance also has different layers; the resonance towards the buying centre, the business context and the business function. Fulfilment of the business function's task-based value factors offers the possibility for the business function to distinguish themselves in the assigned tasks. Brands therefore have a high potential to achieve loyalty by addressing the self-image. A pleasant interactive relationship can even lead to the buying centre members developing relational values towards the corporate brand.

In relation to the existing B2B brand equity literature, the identified brand association factors largely correspond. The different classification approaches of these factors are found to be somewhat irritating and do not represent the holistic nature of a brand. As described, the brand reputation, the brand performance and the brand value seem to contain the identified main brand equity assets of knowledge, capability and attitude. Although there is an overlap, these terms represent the main assets in a more essential way. These categories with their identified characteristics (83 brand association factors) offer a good starting position to define a favourable brand image.

6.1.2 The touchpoints and characteristics of the sources and the channels

The relationship is interactive (Ballantyne & Aitken, 2007; Ford, 2002b) and is largely influenced by people interacting with each other (Borghini & Cova, 2006; IMP-Group, 2002). On the other hand, first associations are formed through corporate one-way

communication marketing activities (Kotler & Pfoertsch, 2006) and indirect network communication (Mäläskä et al., 2011). The description of the buying centre members and the findings concerning the sources disclose that the appearance of a supplier brand is characterised by a team brand. The buying centre tends to first perceive the corporate brand, which has the appearance of a team brand, and the communication is mainly one-way communication. Only after a time does the relationship become interactive and the brand's team members move into focus. The findings disclose that the engineering has a particular and so far unrecognised influence. The eight identified relationship phases are seen to complement the relationship phases of Ford (1980). On the other hand, they offer a more detailed description of a business relationship, the customer motivation and the procedure of the perception from the customer's view. In addition, the identified ratings and the amount of the touchpoints result in a visualisation of the changing influence on the perception throughout the business relationship and the different phases.

The influence on the customer's perception increases during the evaluation phase and reaches the highest impact during the clarification phase. Therefore, straight brand communication is registered and important to reach a basic awareness; nevertheless, the strong associations are accomplished during the first interaction. During these first phases, the competence and the capability assets are the main shaping factors. After a strong drop in influence, it then increases constantly, whereby the interaction increases and the attitudinal asset moves into the spotlight. Due to this finding, it seems sensible that the perceived attitude also has a strong influence on brand loyalty. A team defines the source of the attitude. In addition, the buying centre members seem to be aware that supplier performance is dependent on the strength of different individuals and how these individuals work together. As described in Section 4.2.6, the appearance of the supplier brand seems to be close to the perception of a football team. The fans rely on the team's ability to accomplish a goal and by winning the game the buying centre members profit and possibly develop a certain pride to work with the high-performing team. Depending on the situation, the salesperson can be seen as the striker and the engineering as a goalkeeper or as the centre forward, enabling the sales to achieve the goal or ensure one is not received. In relation to this metaphor, the involved business functions possibly have one or two favourite players (which can lead to relational values) and are interested in some particular attributes; nevertheless, the most important aspect is that goals are attained and the game is won. The achieved goal and the won game then enable the customer team to win their own game. Although all of the studied cases appear to have

these characteristics, the degree of interest in an intensive relationship with the team is derived from the existing interrelation of the customer's own game and the resulting advantage towards the customer's game. This football team comparison aims to describe the customer's perspective in a comprehensible way, highlighting the team perception and the generation of the business function's self-image.

The consideration of this variation of influence, the acknowledgement of the relevant sources and the described interdependence are found to help increase the efficiency and effectivity of brand management activities. It needs to be considered that the individual network is an influential source and that the homepage has a high influence—is one of the first touchpoints and therefore is an influential channel for the first impression. The customer does not see the termination of a business as a final state, since the current situation may change in the future. The engineering business function particularly values familiarity with the competence and the product functionality for future possible applications.

6.1.3 Understanding of buying centre members' brand equity perspective

The findings empirically confirm that the buying centre members act in the interest of the organisation and that they have different functions and responsibilities (Backhaus & Voeth, 2014; Keller & Webster, 2004). The business function influences the focus of interest (Keller & Webster, 2004) and the individual experience, which needs to be considered (Voeth & Brinkmann, 2004). On the other side, the findings disclose that the buying centre members have business function-specific and common valued factors. The variability of the findings also discloses that the business function's range of responsibility varies depending on the case and that the valued factors are task-based. As described in Sections 5.4 and 5.6, the business function values task-specific factors, which help to fulfil the business-specific tasks. This performance is recognised by the organisation and is seen to increase the self-image of the business function, which the business function keeps in mind and considers for future challenges—either in the context of the current company or maybe under the authority of the next employer. The valued factors also vary on behalf of the specificity of the purchase and the exploration has identified that the valued relationship intensity depends on the customer's own business context. The buying centre's focus of the valued factors and the degree of influence on their perception evolves during a business relationship. In addition, the buying centre members are found to be particularly sensitive during particular touchpoints. These

findings improve the current understanding of the buying centre member's perspectives and call for a case- and buying centre member-specific approach to influence customer-based brand equity.

6.1.4 The research model and the elaborated framework

The framework (see Figure 24) divides customer perspectives into three main topics and visualises the alteration over time. The visualisation of the source characteristics shows the sequence of the influential sources and describes the appearance of a corporate brand as a team brand, which progresses from focus on the whole team to focus on an individual team member. The relationship characteristics visualise the business relationship phases on behalf of the customer's perspectives and in relation to evolvement of the business relationship. In addition, the illustration visualises the varying influences during the business relationship and describes the dependence of the added value contribution on the valued relationship intensity. The evolvement from a one-way to interactive communication is described. The asset characteristics visualise the different levels of brand asset characteristics, which the buying centre members value. The buying centre members' perspectives vary depending on the business context. Further, the common buying centre values are identified. The buying centre members' perspectives are influenced by the range of tasks, which appears to be case specific and influenced by the business function itself. The focus evolves from the capability and the competence to the attitude of the team brand. This three-part chart (see Figure 24) offers a good overview of the asset, the relationship and the source characteristics in an industrial B2B context and their development over time. The chart visualises the essential findings and serves as an instrument for management to define a favourable brand image and define efficient and effective measures to develop customer-based brand equity.

The deduced customer-based (see Figure 25) brand equity model focuses on the brand asset characteristics and the interrelation of the layers. In the centre stands a team brand with its three pillars of equity. The brand assets of knowledge, capability and attitude represent essential values—which need to be developed—and complement each other. The know-how represents the base. On the other hand, knowledge does not become effective without the capability and the necessary attitude during implementation.

In an industrial context the business function's (buying centre member) perspectives of brand equity includes multiple layers. In relation to the analysed context, the main factors

are competence, solutions and openness. In addition to the purchasing characteristics and the customer's type of business, the business functions appear to have particular values and are particularly receptive during some business function-specific touchpoints. The buying centre member's interest in the supplier brand is noticeable, even after an official termination of the business.

This remaining interest of the buying centre and that the business functions have specific values indicate an individual interest and loyalty towards a supplier brand. The organisational business context influences the perspective of the buying centre member. From the corporate's viewpoint, an organisation aims to ensure sustainable growth and increase profitability. To reach this aim, strategies are developed and followed. Once a strategy and the interrelating objectives are defined, every department and ultimately every business function receives individual objectives to fulfil, which support the organisation in achieving excellence, reflecting the best possible result. Therefore, every department and the interrelated business functions are forced to perform and are motivated to reach the best result possible. Accordingly, the performance depends on the culture and the management of the organisation and is accredited in different forms (formal or informal, material or non-material). In the end, the individual receives a record of the individual performance through a certificate of employment, which ultimately influences the individual's job/career, and therefore influences a large part of the life of an individual. The aspect of risk reduction is a basic need when choosing a supplier brand; nevertheless, the aim is to achieve the best solution, given that the result also influences the individual's quality of life and the way in which the individual is perceived by the organisation. The intense relationship is the highest level of brand equity in the consumer market (see Section 2.2). This does not differ in the B2B context, although the difference is in the approach and the consciousness with which the relationship is approached. The relationship is an explicit requirement in an industrial B2B context, as the buying centre is dependent on the performance to perform towards his own customer. The findings call for an elaboration of branding activities towards the particular business function perspectives, which appears to create an enduring loyalty that goes beyond the current business relationship.

The achievement of the research objective resulted in an elaborated framework and a customer-based brand equity model, which visualises the different brand asset layers and their interrelation. The identified main assets, the framework and the developed model

are believed to represent the first comprehensive view of industrial brand equity, which is developed from the industrial context. This contribution and other more specific enhancements are described in the following section.

6.2 Contribution to knowledge

In accordance with the overall research objectives, the overarching contribution of this study is the creation of a comprehensive representation of customer-based brand equity in an industrial context. This representation takes into consideration the multi-level interaction between buying and selling firms, the multi-functional nature of the buying centre and the dynamic nature of the interaction between the parties. Moreover, it recognises the fluidity and individuality of the buying centre members, which are driven by their range of tasks. This is described in more detail in the following sections.

The detailed findings and their contribution are grouped into the source characteristics, the relationship characteristics and the characteristics of the brand assets (see also Figure 24: (♦) Augmented knowledge and new knowledge (◆))

Contributions concerning the brand asset characteristics

Based on the disclosed patterns of the identified brand association factors and that the identified factors of current literature appear to be assignable to these categories, it is suggested to define knowledge, capability and the attitude as the three main brand equity assets in a B2B context. Although these topics have already been recognised in the current literature, their definition as assets is seen to represent the first holistic approach towards customer-based brand equity in an industrial context. These defined assets appear in all activities of the supplier brand and therefore present a holistic definition. Up to today, existing B2B brand equity concepts merely concentrated on the different factors of each performance, such as the distribution attributes or the specific company attributes. The three assets appear to be interrelated, which is visualised in a triangle (see Section 5.1 and Figure 25). The exploration has also identified various new brand association factors (see Table 88).

The exploration and the branding literature has identified that the product market context and the degree of the added value contribution affect the perception (Caspar et al., 2002). In addition, the business marketing literature also describes the influence of the purchase specificity on the intensity of the business relationship. Nonetheless, the exploration also

identifies some specific valued brand association factors, which vary depending on the specificity of the performance (see Section 5.5).

The existing literature has recognised—empirically identified or theoretically derived—that business function perspectives vary. This research project is the first to focus on the business function perception and has also identified several new business function-specific factors and business-specific touchpoints (see Table 91). It has also empirically identified some common valued brand association factors. The understanding of requirements and openness are seen to be new emergent factors. Furthermore, the results show that the self-image needs to be addressed on the business function-specific level and that the common factors mainly focus on knowledge and capability aspects. A further new emergent aspect is that the range of responsibility/tasks—which is influenced by the case context—influences the business function’s perspective. The analysis of the relationship characteristics also discloses that the focus of the buying centre advances during the business relationship; it starts with a focus on capability and competence characteristics and moves on to focus on attitude aspects (see Table 82).

Contributions concerning the relationship characteristics

Based on the identified touchpoints and the disclosed patterns, eight phases have been defined. The defined phases appear to partly correspond with the relationship phases defined by Ford (1980) and the purchase phases by H. P. Richter (2001). Nonetheless, no existing literature has identified business relationship phases from an opinion-forming perspective or considered the degree of influence and whole business relationship, starting with the first contact and finishing with the termination of the business (see Section 5.2 and Table 89). The evaluation phase is the second most influential phase and appears to be the main awareness-generating phase. The most influential phase is the clarification phase. Interrelated with the description of the phases, the main valued brand association factors are disclosed (see Table 82). The number and the rating of the identified touchpoints have allowed disclosure that the valued intensity of the relationship is influenced by the customer’s own business context. The valued intensity is influenced by an added value contribution through joint interworking or the contribution towards the communicated added value of the customer (see Section 5.5 and Table 92). A further new finding is that the business relationship starts with one-way communication and develops into an interactive relationship (see Section 5.3 and Table 90) and is not simply interactive as described by Ford (2002b) and Hutt & Speh (2004). Moreover, it is found that the

interactive relationship can lead to relational values towards staff members, which are also given to the corporate brand.

Contributions concerning the source characteristics

A large number of the identified sources have been identified by previous research. However, the high relevance of the engineering business functions appears not to be recognised. The described branding pool by Mäläskä et al. (2011) is recommended to be complemented by the historical individual network. A further new emergent aspect is that the patterns of the influential sources and the statements of the participants lead to the insight that the corporate brand in a B2B context appears as a “team brand”. In relation to the evaluation phase, the high relevance of the survey of the homepage is found to be remarkable. So far, this finding has not been particularly addressed by academic literature, which seems to be explained by the current information era and that publications are challenged to keep up with the pace of change. The high influence appears to be determined by the high availability (24/7) and the limitless accessibility. Concerning the statement by engineering in Case 2, it is valued that the required specifications are available online and that the suppliers that do not offer the needed information tend not to be considered (Engineering “EPH” Case 2, interview, 13 August, 2012). It appears to be a matter of finding solutions efficiently, without having to engage with the supplier brand before a solution is drafted.

These main areas of contribution imply some implications for management.

6.3 Managerial implications

The elaborated customer-based brand equity framework is believed to represent an applicable management tool to set up a favourable brand image and define effective and efficient branding strategies. The defined customer-based brand equity model discloses the multiple brand asset layers, which need to be addressed to reach full effect and create long-term brand resonance. The following implications and their contributions are grouped into source characteristics, relationship characteristics and the brand asset characteristics.

Implications concerning the brand asset characteristics

Based on the results concerning the identified brand asset characteristics, it is recommended that the management review the corporation’s characteristics, strengths

and the differentiation potential within the defined brand assets knowledge, capability and attitude. The gathered list of valued brand association factors is believed to serve as a basis to define valuable case-specific brand association factors. The commonly valued factors need to be defined, the business context considered and the task-based valued factors of the relevant business functions addressed. The multiple case study identified the engineering, the purchasing and the management as the main business functions. To consider is that common values appear to focus on competence and capability and business function specific factors are found to have a focus on the attitude and relationship aspects. Whereby, the engineering business functions particularly values detail information and reaction time. On the other side, the findings also show that the compilation of the buying centre members varies and that the area of responsibility of the business function varies per case. Therefore a case specific analysis should be accomplished (Mudambi et al., 1997).

Implications concerning the relationship characteristics

According to the results, the main awareness is generated during the evaluation phase and not during the pre-contact phase. This finding calls for a careful consideration of investment in relation to general brand communication during the pre-contact phase and the evaluation phase. The high influence of the evaluation phase and the relevance of the touchpoint survey of the homepage indicate that upcoming interrelated topics should be considered as inbound marketing. The evaluation phase is mainly accomplished by one-way communication and the brand communication needs to address the valued factors during this relationship phase. Furthermore, the high impact of the image generation during the clarification phase and its interactivity needs to be considered. Besides the attitude, the main focus during the first phases needs to consider a particular differentiation in relation to knowledge and capabilities. After a reduction of the impact on the perception, the influence continuously increases over time, and the perceived attitude becomes particularly influential. In agreement with the IMP Group (2002), the long-term relationship needs to be maintained and the findings show that in particular the attitude towards learning and solutions need to be considered.

Apart from the current customer-supplier context, the findings indicate that the business functions respond to particular factors and the loyalty can even expand during a termination of the current business relationship. This insight calls for more business function centred activities, and more individual maintenance of the relationship. This shift

towards the individual business function fosters the already close and interactive relationship, appears to be highly effective, and potentially creates a strong brand loyalty.

The findings also show that the valued relationship intensity is dependent on the added value contribution and the degree of interactivity. Further, management is challenged to think about how the offered performance appears in view of the customer's market and what added contribution a potential joint-work would imply. This degree of added value appears to determine the maximum relationship intensity. Nevertheless, the results also show that this pattern appears to relate to the business context layer and that the business functions value a personal relationship and keep valued supplier brands in mind (see Case 2 Section 4.2.2.4).

Implications concerning the source characteristics

The finding that the brand is characterised as a team brand implies that consideration should be given to the quality of the corporate's team and that how these qualities are communicated should be addressed. This appears to be particularly relevant for the sales and the engineering team. The corporate brand communication and the branding pool (network) (Mäläskä et al., 2011) are very influential sources for creating the first brand awareness. Moreover, the individual buying centre brings in their own individual network. As the business relationship continues, the buying centre perceives further sources (production, order processing, quality management, etc.). Management also needs to set up a well performing team, which incorporates the characteristics of the defined brand assets. This is particularly important during the relevant touchpoints.

Suggestion for procedure

These resulting implications recommend that the management needs to assess their individual touchpoints, their business relationship phases, the involved departments and the quality of the accomplished performances. These performances need to be studied in light of a defined and favourable brand image. The presentation of the individual case studies and the various identified factors are believed to serve as a toolbox to develop and differentiate a particular brand. The corporate communication, the organisation and the behaviour of the people involved need to be in line with the defined brand image. This will need careful analysis and subsequent measures, such as process adaptations, communication guidelines and staff training. Long-term strategies need to address the business function's values and measures need to be taken that address the relationship

with the individual buying centre member (for example involvement in different stakeholder groups, purchasing association or technical associations, business clubs).

These measures are found to help develop the basic brand equity. On the other hand, the high variability of the identified brand association factors and the different relationship constellations that need to be considered are found to be challenging. In relation to the influence of the valued relationship contribution, it seems sensible to analyse both the existing and the potential customer characteristics and adapt the measures accordingly. Larger customers are found to react to active communication in relation to joint-work optimisation. The characteristics of the valued brand association factors vary depending on the degree of specificity of purchase (customisation). Customers purchasing standard goods are found to particularly value continuity, customer orientation and clarity of communication. Customers such as machine builders for whom the supplying item is an integrated part of their added value are interested in active partnerships. The segment-specific implementation is found to be extensive; however, it appears to be feasible and can be implemented by a general approach. On the other hand, the consideration of the individual's range of tasks is found to be challenging within a general approach, as the identified variability will need a more individual approach. Considering an organisation has finite resources, it appears effective to define a limited number of key accounts and analyse and approach them individually. To reach an optimum effect, these key accounts need to represent key players within the network (branding pool) (Mäläskä et al., 2011).

Key account management offers a means to manage customer-based brand equity. Key account management is an established method to develop loyal customers in a business to business context. It also provides that the key accounts organisation is analysed to implement specific measures (McDonald, Millman, & Rogers, 1997). As described by Zupancic (2008), an effective key account management approach needs screening of information, development of individual strategies, specific solutions, management of processes and structures, and a skilled team. Out of the number of key account management models, the described interdependent model of McDonald and Woodburn (2007) appears to be a suitable approach as it enforces interaction between the organisations and defines an active management for the communication. At the interdependent stage, the organisations collaborate across a range of departments and among different business functions (McDonald & Woodburn, 2007). On the other hand, this is not possible with all customers as both organisations need to acknowledge the

importance of the other and they need to trust each other (McDonald & Woodburn, 2007). The key account manager is challenged with orchestrating the communication of the multifunctional teams (McDonald & Woodburn, 2007). Moreover, creating customer-based brand equity is a long-term process (Keller, 2013) and requires consistency over time. In this respect, the elaborated customer-based brand equity framework is found to represent a stimulating basis for managing the relationship. As Mäläskä et al. (2011) describe within their branding pool approach, successful implementation will increase customer-based brand equity throughout the market. The established interactivity will develop relational values on behalf of the corporate brand (See Section 4.2.6). Moreover, the addressed self-image benefit is found to develop an individual's (buying centre member) brand loyalty, which extends beyond the current organisational (supplier-customer) context (see Section 5.6).

On the other hand, the application needs to consider some particular limitations, which are described in the following section. Moreover, the research process and the findings point out some routes for further research projects.

6.4 Limitations and recommendations for further research

The presented findings, the elaborated framework and the customer-based brand equity model aim to develop the understanding of the current body of knowledge in the area of customer-based brand equity in an industrial context. On the one hand the findings serve as a base to make judgements about transferability to other contexts (Bryman & Bell, 2003). The findings are developed from four cases that present particular purchasing characteristics and are active in a particular business context. Therefore, the particular findings need to be judged in relation to the particular application in other purchase or business contexts.

A further limitation is found in the considered business functions. Although the main business functions appear to be present, the multiple case study also showed that the composition of the buying centre could vary. Moreover, the range of responsibility can vary depending on the organisation of the company.

The cases are also limited to companies that purchase complex technical products that are integrated into their own product. This limitation excludes companies that mainly purchase raw material and the purchase of systems or investments as machines.

In any case, the findings indicate that the business context, the customer's view concerning added value, the individual composition of the buying centre and their area of responsibility need to be investigated to apply effective measures. In addition, the findings also disclose some further areas of interest, which would be valuable to explore.

- The findings disclose the impact on the self-image of the business function. This impact could be further explored by considering the perception of the internal organisation, starting by interviewing the colleagues that have direct contact with the main business functions of engineering, purchasing and management.
- A further interesting area is the business function's identified loyalty towards experienced brands, which could be explored by asking the business functions about their past behaviour and the intended behaviour in relation to a specific brand.
- Brand personality could be further explored in relation to the identified team-brand appearance, which indicates that the favourable B2B brand is characterised by a multiple personality.
- Moreover, the identified relation towards the valued relationship intensity and the added value contribution and the variety concerning the specificity of purchase performance is found to be of further value to explore.
- Finally, the accomplished approach could be extended to investment or system purchases and other customer business types, in the sense of exploring the replication.

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A. Appendix: Interview guideline

Procedure	Explanations /Questions/Tasks
1 Interview -Purpose of research -Procedure	-Ask for room with minimum noise -Marketing research -Explore perspective of buying centre -No mentioning of term brand -Two interviews (data generation, verification) -Possibility to record data -Data is treated confidentially -Data generated will be handed over—possibility of withdrawal
1 Interview categorisation	Name, age, education, years of employment, decider (y/n), business function, responsibilities
1 Interview Unaided awareness	-List 4 to 5 suppliers that come to mind -Rank the suppliers regarding their general performance
1 Interview Free association technique Projective technique	-Show printed logos of defined suppliers -What do you think (or feel) about the company? -With what car brand would you compare the supplier? -Why did you choose this car brand?
1 Interview Touchpoints and experiences during customer-supplier relationship process	-On what occasions do you have any kind of contact with the supplier (first – last)? -How did you perceive the supplier on these occasions? -Can you describe any positive or negative experiences?
1 Interview Importance of touchpoints	-Which of the listed touchpoints are the most important (two to three)
1 Interview Summary of thinking process	-What is most important for a supplier?
2 Interview Disclosing the aim of the research	-Explain the aim and reason for not revealing -Hand over transcribed/coded interview and the drafted model
2 Interview Explanation of how the draft model is created	-Explain the procedure and what is presented in the draft model
2 Interview Verification of the identified associations and review of importance ranking	Go through each of the identified brand association factors and how it is derived
2 Interview Signing of declaration of agreement	-Explanation of reason for the declaration of agreement -Inform that data can be deleted -Inform that data is treated confidentially

B. Appendix: Individual draft brand equity model (sample)

Draft Brand Equity Model out of the first interview – Interviewee Case 1 – Technischer Einkäufer technical purchaser - decider)

Relevante wahrgenommene Faktoren zur Meinungsbildung Relevant perceived factors to form opinion	Importance xx important xxx very important	Vorteilhafte Assoziationen Favourable associations	Medium	Kommentar Comments
Operativer „Fit“ als Lieferant (A) Operative „fit“ as a supplier machinery flexibility Branchenfit / Sector fit	XX	Schnell Vorort: Kurze geographische Distanz „200km“ Fast at the location of the supplier: short geographical distance „200km“ / Professionalität: Erfüllt allgemeine Vorgaben (Zertifikat), achtet auf die Umwelt Professionalism: Fulfills general guidelines, considers environmental issues / Flexibilität + Output: Grosse Anzahl Bestückungsautomaten Flexibility and Output: Amount of placement machines Know how: Hat Erfahrung – wissen was sie brauchen Know how: has experience – knows what he needs / Genauigkeit: finden Fehler Precise: finds mistakes	Internet	Blindanfrage für Angebot an bis zu 10 Lieferanten
(B) Know how and accurateness understanding of requirements Ehrlichkeit, Preisgefuge und Genauigkeit, (C) Honesty, price range and accurateness, delivery time	XXX	Preis: Preisgefuge (muss nicht der günstigste sein, Preis muss zu uns passen) Price: price range (does not have to be the cheapest but has to fit with us) / Genauigkeit und Know how: Offerte hat eine solide Basis Accurateness and Know how, Offer has a solid base	Email (Address on the homepage), Anfrage/Inquiry Offerte Offer	
Qualität (Lieferperformance, Zuverlässigkeit) (D) Quality (delivery performance, reliability) Zusammenarbeit, Kontinuität (E) Cooperation and continuity Branchenfit / Sector fit	XXX	Prozesse: Haben sie ihre Prozesse im Griff, Flexibilität passend zu Auftragsvolumen (Maschinenpark) Processes: do they have control over their processes, flexibility match with contract volume (machine park) / Erscheinungsbild (Kleider), Ordnung (Sauberkeit) Appearance, Order, Cleanliness / Lager – System Stock system Prozesspapiere > Zuverlässigkeit > Rückverfolgbarkeit Process documentation > reliability > traceability / Miteinander klar kommen to be able to work with each other / Einander verstehen to understand each other / Gute Mitarbeiter (sollten bleiben) good employees (should stay)	Meeting Vorort (Verkäufer) Meeting at the location of the supplier	
Preis-Transparenz, (F) Price transparency, best price > no games, Openness (calculation)	XX	Preis muss nachvollziehbar sein, Wille zur Partnerschaft Price has to be comprehensible, will for partnership	Telefon phone	Nachverhandlungen
Vertrauen, Geschwindigkeit (G) Confidence and speed	X	Offenheit, Realistische und sportliche Termine Openness, realistic and sportive deadlines	Telefon phone	Muster bestellen und Mengenkontrakt (schriftlich)
Kompetenz und Commitment, (H) Competence and Commitment and reliability delivery time	XX	Termeinhaltung, Versteht die Anforderungen, Zeigt Engagement und Commitment Keeps deadlines, understands the requirements, shows engagement	Email	
Qualität (Prozesse, Organisation) (I) Quality (Processes, Organization), reliability	XXX	Hat Prozess im Griff und kennt die Anforderungen und hat eine gute Produktionsqualität Has control over his processes and knows the requirements and has good production quality / Termineinhaltung keeps deadlines	0 Serie Musterlieferung sample delivery	
Offenheit (Zuverlässigkeit), Lernverhalten und Umgang mit Problemen // Sprache > einander verstehen (J) Openness (dependability), learning behaviour, problem handling		Muster i.O. samples are ok	Email / Telefon phone	
Flexibilität und Geschwindigkeit (K) Flexibility and speed Partnerschaft (Commitment) (L) Partnership (Commitment)	X	Frühzeitige Kommunikation (offene Kommunikation) betimes communication (open communication)	Email / Telefon phone	Serielieferung
Vertrauen Qualität und Reliabilität (M) quality and reliability, commitment, openness, learning behaviour (improvability) Fähigkeit (Organisation), Partnerschaft (L) Capability (Organisation), and partnership.	XX	Fähigkeit neue Anforderungen effizient und effektive umzusetzen, Ability to efficiently and effectively implement new requirements / Geben und Nehmen: Bemühung auf Bedürfnisse einzugehen Giving and taking: Effort to consider needs Produkt Qualität Liefertreue Product quality, the delivery-reliability Ehrlichkeit und gute Planungsfähigkeit honesty and good planning capability Wiederholte Fehler nicht gut repeated failures are not good	Email / Telefon phone	Änderungen (Standardleistung) Key Account Manager
	XX		Email / Telefon phone	Liefertermine

Zuverlässigkeit, Flexibilität, Qualität, Preisgefuge (zu tief > Risiko > Folgekosten), Partnerschaft Reliability, flexibility, quality, price structure (if to low price > risk for follow-up cost, Partnership

D. Appendix: Excel data base (sample)

Case	job title	role	Business Function	Reason	No.	Touching point	Importance	Source	channel	brand association factor 1
1	Head of Purchasing	D	Purchasing	relationship	HP13	Modifications	2	Sales, Engineer	phone	Ability to execute
4	Senior Manager Electronics	D	Engineering	relationship	HE5	Price Reports	2	ERP System	documents	Ability to improve (production process)
1	Technical Purchaser	D	Purchasing	clarification	P2	Inquiry	2	sales	phone	Accurateness
1	Technical Purchaser	D	Purchasing	clarification	P3	Offer	3	sales	phone	Accurateness
1	Head of Purchasing	D	Purchasing	clarification	HP5	Offer	2	sales	email	Accurateness
1	Head of Purchasing	D	Purchasing	clarification	HP8	Initial samples	1	initial sample test report	documents	Accurateness
1	Head of Purchasing	D	Purchasing	delivery	HP10	Delivery of 0 serie	1	scope of delivery	phone, email, visual appearance	Accurateness
3	Geschäftsführer	D	Management	clarification	M6	Offer	3	sales	Fax	Accurateness
3	Geschäftsführer	D	Management	delivery	M8	Delivery of products	1	product, employees	visual appearance	Accurateness
3	Bereichsleiter Einkauf und PB	D	Purchasing	clarification	P4	Offer	1	sales	email	Accurateness
1	Component Engineer	B	Engineering	clarification	2CE3	Sample test	3	products	documents	Accurateness (documentation)
1	Head of HW/SW	D	Engineering	clarification	E5	Contact with engineering	3	Engineering	face to face	Acknowledges own limitations
3	Leiter Elektronikentwicklung	B	Engineering	clarification	E6	Sample test	3	documents	documents	Added value (functionality)
4	Senior Manager Electronics	D	Engineering	search	HE1	survey homepage	2	brand communication	internet	Added value (functions)
4	Component Engineer	B	Engineering	clarification	2CE3	Sample test	3	products	performance	Added value (towards competition)
4	Strategic purchaser Mechanics	D	Purchasing	search	PM3	trade shows	1	products, brand communication, employees	visual appearance	Added value (towards competition)
1	Head quality management	I	Quality management	to verify	Q2	random examination	1	delivery dates	ERP System	Adherence
3	Bereichsleiter Einkauf und PB	D	Purchasing	use	P8	Installation and commissioning of	3	products	handling	Adherence
3	Bereichsleiter Einkauf und PB	D	Purchasing	order	P6	Order	1	sales	fax	Adherence (reliability)
3	Bereichsleiter Einkauf und PB	D	Purchasing	delivery	P7	Delivery of products	1	products	visual appearance	Adherence (reliability)
1	COO	D	Management	verify stability	M4	Daily business	3	purchasing, production	face to face	Adherence, product quality
1	Head of Purchasing	D	Purchasing	search	HP1	Supplier base	1	Data of existing suppliers	ERP System	Approved
1	COO	D	Management	survey	M3	Visit suppliers facility	3	physical evidence, organisation, employees	face to face	Attitude towards work
1	COO	D	Management	to verify	M2	survey homepage	2	brand communication	internet	Authenticity
1	COO	D	Management	request	M8	Supplier assessment	1	Supplier	email	Authenticity
4	Strategic purchaser Mechanics	D	Purchasing	search	PM2	survey homepage	1	brand communication	internet	Authenticity
4	Strategic purchaser Mechanics	D	Purchasing	search	PM3	trade shows	1	products, brand communication, employees	visual appearance	Authenticity
4	Strategic purchaser Mechanics	D	Purchasing	clarification	PM5	Visit of supplier	2	sales	face to face	Authenticity
4	Component Engineer	B	Engineering	clarification	1CE3	Offer	1	sales, internal purchasing	email	Availability (current and longterm)
2	CEO	D	Management	clarification	M2	technical clarification	1	sales, engineer	phone	Availability
2	Projektleiter (hardware)	D	Engineering	clarification	EPH4	technical clarification	3	sales	phone	Availability
2	Projektleiter (hardware)	D	Engineering	order	EPH5	Order	2	sales	phone	Availability
2	Projektleiter (software)	D	Engineering	order	EP57	Order	1	sales	phone	Availability
3	Geschäftsführer	D	Management	clarification	M6	Offer	3	sales	Fax	Availability
3	Verkausleiter	B	Sales	delivery	S5	Delivery of products	2	product, colleagues	face to face, email	Availability
3	Bereichsleiter Einkauf und PB	D	Purchasing	clarification	P4	Offer	1	sales	email	Availability
3	Leiter Elektronikentwicklung	B	Engineering	clarification	E6	Sample test	3	sales	document	Availability
4	Strategic purchaser Electron	D	Purchasing	clarification	PE4	Offer	3	sales	document	Awareness
2	Projektleiter (hardware)	D	Engineering	search	EPH1	pre-defined by customer	1	customer	specification	Awareness
1	Technical Purchaser	D	Purchasing	clarification	P5	Price negotiation	2	sales	phone	Best price
2	CEO	D	Management	clarification	M4	Offer	1	sales	email	Best price
1	Head of Purchasing	D	Purchasing	relationship	HP14	Proclamation of business	1	sales	phone	Business like
3	Leiter Elektronikentwicklung	B	Engineering	relationship	E10	Proclamation of business	1	sales	face to face	Business like
4	Senior Manager Electronics	D	Engineering	relationship	HE8	Proclamation of business	1	sales	face to face	Business like
4	Strategic purchaser Electron	D	Purchasing	relationship	PE10	Proclamation of business	1	sales	face to face	Business like
4	Strategic purchaser Mechanics	D	Purchasing	relationship	PM11	Proclamation of business	1	sales	face to face	Business like
4	Strategic purchaser Mechanics	D	Purchasing	search	PM1	consultancy of network	1	network (privat, business)	phone	Capabilities (performances, solutions)

E. Appendix: Brand association factors (total list)

Existing in literature	Relationship	Delivery	Attitude	Capability	Knowledge	Case 1	Case 2	Case 3	Case 4	Frequency	Brand association factors	Engineering	Purchasing	Management	Quality management	Sales	Finance
x					x	30	16	29	18	93	Competence	E	P	M	Q	S	F
x				x		12	16	29	28	85	Solution	E	P	M	Q	S	F
x		x				24	20	18	20	82	Product	E	P	M	Q	S	F
x				x		35	6	10	21	72	Price	E	P	M	Q	S	
x			x	x		30	5	16	9	60	Reliability	E	P	M	Q	S	
x			x			9	6	7	18	40	Openness	E	P	M		S	
x			x			3	12	7	15	37	Continuity	E	P	M			
			x			2	4	11	14	31	Customer orientation	E	P	M		S	F
x				x		17	1	2	11	31	Capability	E	P	M			
x				x		8	8	5	8	29	Speed	E	P	M	Q	S	
x				x		6	9	5	7	27	Understanding of requirements	E	P	M		S	
x	x					9		9	6	24	Partnership	E	P	M		S	F
			x				8	6	7	21	Clarity	E	P	M			
x				x		6	3	7	5	21	Technology	E	P	M			F
x			x	x		6	2	3	9	20	Flexibility	E	P	M			
x		x					6	6	6	18	Detail information	E		M		S	
x				x			11	4	2	17	Availability	E	P	M		S	
x				x		3	9	2	3	17	Innovation	E	P	M			
x			x			4	2	3	6	15	Honesty	E	P	M	Q	S	
			x				5	6	4	15	Transparency	E	P	M			F
	x					9	1		2	12	Fits with us	E	P	M			
			x	x		4	2	2	2	10	Social competence	E	P				F
			x	x		3	1	3	3	10	Systematic	E	P	M		S	
			x	x		5		3	1	9	Accurateness	E	P	M			
			x				2	2	5	9	Interest	E	P				
			x			5		1	3	9	Orderliness	E	P	M	Q		
x			x				2	5	2	9	Responsiveness	E	P	M			F
x	x						1	6	1	8	Relationship	E	P			S	F
x			x	x			4	3	1	8	Simplicity	E	P	M			
x	x						1	1	6	8	Size	E	P	M			
			x			2	1	2	3	8	Business-like	E	P	M			
x			x			7				7	Commitment	E	P				
			x			1		5		6	Fairness		P	M		S	F
			x			3		2	1	6	Attitude towards work	E	P	M			
x			x			2			3	5	Authenticity		P	M			
				x		2	3			5	Efficiency	E		M			
				x		5				5	Improvement	E	P	M			
x			x	x		2	1	1	1	5	Logic	E	P	M	Q		
x				x		2	1	2		5	Management			M			F

x			x		5			5	Organisational talent		P	M			
			x			1		4	Premium	E	P	M			
	x				2		1	2	Proximity		P				
x			x				4	1	Respect	E	P			S	F
x		x		x			2	1	Support	E	P				
x			x					3	Trustworthiness		P	M			F
	x						1	2	Awareness	E	P			S	
			x				2	2	Engagement	E	P	M			
			x	x			3		Practicality	E	P	M			
				x			4		Quality assurance		P		Q		
x			x	x				4	Willingness to negotiate		P				
x				x		3	1		Capacity	E		M			
			x					3	Cost consciousness			M			F
			x	x				3	Decision making power		P				
x		x		x		3			Delivery performance		P	M			
			x	x				2	Development		P	M			
				x			2		Market share	E	P	M			
	x					2			Bad experience			M	Q		
			x				2		Conservative	E		M			
			x	x			1	1	Consistency			M			
	x					2			Monopolist	E	P				
	x					2			Pleasant relationship	E	P				
			x	x			2		Structure	E					
			x					2	Willingness to learn		P				
			x					1	Cultivated	E	P				
				x				1	Ability to improve	E					
			x	x		1			Acknowledges own limitations	E					
			x				1		Careful			M			
				x				1	Communication skills			M			
			x					1	Competitive		P				
x			x					1	Credibility	E					
				x			1		Design	E					
				x			1		Differentiation			M			
				x				1	Economy of scale	E					
	x							1	Familiarity		P				
x	x					1			Fit of company size			M			
x				x				1	Global			M			
	x							1	History		P				
x			x	x		1			Negotiation	E					
	x					1			Ownership			M			
				x		1			People performance	E					
				x				1	Understanding	E					
	x					1			Visibility	E					
			x					1	Willingness to help	E					

F. Appendix: Overview of favourable factors (literature review)

Factors	K	P	M	B	L	BE	H	BN
Product								X
Quality		X			X	X		
Assortment		X						
Innovation		X						
Total solution		X						
Customisation		X						
Value-in-use		X						
System usability, ease of operation	X					X		
Simplicity	X							
Cost/price	X				X	X		
System reliability / dependability	X			X		X		
Integration, Compatibility	X			X				X
Flexibility	X							
Reporting functionality	X							
Precision			X					
load of bearing			X					
Innovation fit			X					
For purpose over-engineered			X					
Performance						X		
Service and Support								X
Prior to purchase (Product test)		X	X					
After-sales support	X	X			X	X		
Experience, Expertise and advice		X	X	X			X	X
Site support			X					
Understands our needs (business)			X					
Troubleshooting			X					
Ease of maintenance						X		
Distribution								X
Reliable deliveries		X	X					
Speedy deliveries		X						
Ease of ordering		X	X					
Stated availability			X					
Stated lead times			X					
Emergency responds			X					
Relationship								
Trustworthiness		X			X		X	
Perceived commitment		X						
Responsiveness		X						
Adaptations		X						
Co-operation		X						
Information exchange/depth		X		X				
To be present				X				
Relationship with the supplier's personnel						X		
Company								
Leadership		X						
Management		X						
Community		X						
Technology/system is proven	X				X			
Stability of the company	X		X					
Years of experience			X					
Global coverage			X					
World class			X					
Technical leadership, Innovation			X		X		X	
Global perspective			X				X	
Reliability				X	X		X	
Social responsibility				X				
Easiness				X				
Price negotiation				X				
Risk reduction					X			
Reassurance					X			
Credibility					X			
Capacity					X			

Infrastructure					X			
Capabilities					X			
Supplier's reputation						X		
Personality		X						
Charisma				X				
Down-to-earth				X			X	
Professional							X	
Analytical							X	
Hard working							X	
Intelligent							X	
Pro-active							X	
Educated							X	
Proper							X	
Careful							X	
Rational							X	
Problem oriented							X	
Diligent							X	
Scientific							X	
Creative							X	
Young							X	
Glamorous							X	
Cool							X	
Trendy							X	
Daring							X	
Good looking							X	
Adventurous							X	
Imaginative							X	
Cheerful							X	
Feminine							X	
Tempered							X	
Sincere							X	
Real							X	
Honest							X	
Original							X	

K: Kuhn et al. (2008) / P: Persson (2010) / M: Mudambi et al. (1997) / B: Bausback (2007) / L: Leek and Christodoulides (2012) / BE: Bendixen et al. (2004) / H: Herbst and Merz (2011) / BN: Beverland, Napoli, and Yakimova (2007)