Managing brand architecture – The impact of corporate and product brands

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Extended Abstract

Abstract
The complexity of brand portfolios has considerably increased within the last few years. This raises important challenges for many corporations. In this context, the current state of brand architecture research lacks answering issues of high importance. Thus, the authors develop an approach to empirically investigate the perceived brand architecture of different companies. This paper investigates the behavioral relevance of corporate and product brands in customers’ point of view. As a result, it was shown that corporate brands as well as product brands have a behavioral relevance across industries. Differences in the perception of the brand architecture can especially be explained by the perceived scope of the product and service portfolio the corporate brand.
1. Introduction

The width and depth of companies’ brand portfolios has increased significantly within the last years. Thus, the complexity of managing brand portfolios is getting higher (Aaker 2004). In such a situation, many customers were faced with an information overload. The question of the optimal structure within the brand portfolio is getting a higher relevance (Strebinger 2011).

Therefore, the challenge for companies is to analyze the relationship between their brands and which influence they have on the purchase decision of their customers (Muzellec and Lambkin 2009). Thus, the question is raised of how many brands are considered and in which necessary constitution they are requested to increase customer benefits and lower brand management costs (Aaker 2004). In addition, the strategic development of brand architecture was declared as one of the top priorities in branding research (Keller and Lehmann 2006). The term brand architecture is therefore understood as the development of the formal and contextual structure of the brand portfolio (Strebinger 2011).

We recognize that the perceived brand architecture is very often just interpreted as the optically observed brand architecture, which is too short thinking. In this context, the investigations only focus on manifest representations of the brand, such as how different brand logos are perceived by the customer (Rao, Agarwal and Dahlhoff 2004). Nevertheless, a brand is more than just a brand logo. Brand associations often will be ignored, but a brand should be understood as a bundle of associations (Keller 1993).

The paper has the aim to empirically investigate the perceived brand architecture in customers’ point of view based on a multiple brand image measurement. It further seeks to explain differences in brand architecture perception across industries. First, the model will be developed based on previous research. Further, the design of the empirical study and results are presented. The paper closes with a discussion of the results.
2. Model Development

The relevant and most cited brand architecture approaches were extrapolated from the works of Aaker (2004), Rao, Agarwal and Dahlhoff (2004), Laforet and Saunders (2005), Muzellec and Lambkin (2009), and Strebinger (2011). Nevertheless, none of these approaches is able to satisfy the need for measuring the perceived brand architecture by the external target group of customers and explain certain differences. As a brand is a bundle of associations, relevant brand associations need to be taken into consideration as well (Keller 1993). A multiple brand image measurement will be developed.

The main model of measuring multiple brand images covers the relation of the corporate brand and the product brand on the purchase intention. It is theoretically based on the theory of reasoned action (TRA) (Fishbein and Ajzen 1975). As both brands are determined by their brand image and they belong to the same brand portfolio (Keller 1993), both brand images can have an influence on the overall evaluation of the product, understood as a bundle consisted of both product brand and corporate brand (Laforet and Saunders 2005). Therefore, we hypothesize that the corporate brand as well as the product brand have an influence on the behavioral intention of purchasing a product:

\[ H1: \text{The corporate brand image has a positive influence on the purchase intention.} \]

\[ H2: \text{The product brand image has a positive influence on the purchase intention.} \]

The first moderating effect focuses on corporate characteristics and covers the perceived scope of the product and service portfolio of the corporate brand. It is theoretically based on the competence-based view (CbV) (Prahalad and Hamel 1990; Penrose 2008). The product and service portfolio is understood as a result of a competence-based production and ongoing improvement of market offers (Penrose 2008). Within the last years and decades the complexity of product portfolios has increased significantly (Aaker 2004; Schuiling and Kapferer 2004; Strebinger 2011). This raises consumer confusion and a lack of product-specific information. Therefore, product brands are required for delivering these product-specific information (Penrose 2008; Strebinger 2011). In this context we can hypothesize that a higher perceived scope of the product portfolio induces an increasing relevance of product brands as differentiators within the portfolio:

\[ H3a: \text{The higher the perceived scope of the product and service portfolio of the corporate brand is, the smaller their behavioral relevance.} \]
2. Model Development

H3b: The higher the perceived scope of the product and service portfolio of the corporate brand is, the higher the behavioral relevance of the product brands.

The second moderating effect focuses on industry characteristics and covers the perceived risk on purchasing within a product category. It is theoretically based on the risk theory (Taylor 1974). The perceived risk on purchasing is understood as „the extent to which the consumer is uncertain about the consequences of buying, using, or disposing of an offering“ (Hoyer and MacInnis 2004, p. 68). The brand can thus act as a risk-reducing signal (ChingChing, Miniard, and Engel 2005) and is seen as an information chunk (Miller 1956). A higher perceived risk of purchasing induces an increasing relevance of a trust-related endorser, which is the main function of corporate brands within the brand portfolio (Devlin 2003; Strebinger 2011). In this context we can hypothesize that a higher perceived risk on purchasing within a product category induces an increasing relevance of corporate brands as trust-related endorsers within the portfolio:

H4a: The higher the perceived risk on purchasing within a product category is, the higher the behavioral relevance of the corporate brand.

H4b: The higher the perceived risk on purchasing within a product category is, the lower the behavioral relevance of the product brands.

Figure 1: Structural Model
3. Empirical study

3.1 Study design

In the first stage, we conducted a pre-test to obtain baseline evidence about the awareness of the brands used in the study. The study covers eight different industries. Three different pairs of brands are investigated for each industry. The following brands were used:

<table>
<thead>
<tr>
<th>Industrie</th>
<th>Corporate Brand</th>
<th>Product Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Products:</td>
<td>Nestlé</td>
<td>Nescafé</td>
</tr>
<tr>
<td></td>
<td>Kraft Foods</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td>Danone</td>
<td>Actimel</td>
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<tr>
<td>Electronic</td>
<td>Panasonic</td>
<td>Lumix</td>
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<tr>
<td>Devices:</td>
<td>Apple</td>
<td>iPhone</td>
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<td></td>
<td>Microsoft</td>
<td>X-Box</td>
</tr>
<tr>
<td>Automotive:</td>
<td>Volkswagen</td>
<td>Golf</td>
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<tr>
<td></td>
<td>Opel</td>
<td>Astra</td>
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<td></td>
<td>Mercedes</td>
<td>C-Class</td>
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<tr>
<td>Pharma:</td>
<td>Bayer</td>
<td>Aspirin</td>
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<td></td>
<td>Novartis</td>
<td>Voltaren</td>
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<tr>
<td></td>
<td>Johnson &amp; Johnson</td>
<td>Dolormin</td>
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<thead>
<tr>
<th>Industrie</th>
<th>Corporate Brand</th>
<th>Product Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks:</td>
<td>Deutsche Bank</td>
<td>DWS</td>
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<td></td>
<td>Sparkasse</td>
<td>Deka Investments</td>
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<td></td>
<td>Volksbank</td>
<td>Union Investment</td>
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<tr>
<td>Hotels:</td>
<td>Accor</td>
<td>Mercure</td>
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<td></td>
<td>Marriott</td>
<td>Courtyard</td>
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<tr>
<td></td>
<td>Starwood</td>
<td>Sheraton</td>
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<tr>
<td>Sports:</td>
<td>Fußball Bundesliga</td>
<td>Bayern</td>
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<td></td>
<td>Basketball Bundesliga</td>
<td>Alba Berlin</td>
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<td></td>
<td>Handball Bundesliga</td>
<td>THW Kiel</td>
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<tr>
<td>Destinations:</td>
<td>Spain</td>
<td>Andalusia</td>
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<tr>
<td></td>
<td>Italy</td>
<td>Tuscany</td>
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<td></td>
<td>Austria</td>
<td>Tyrol</td>
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The second stage of the analysis is a quantitative evaluation of the structural model. The main study was conducted to test hypotheses H1 to H4 using a structural equation modelling (SEM) approach (Bagozzi and Yi 2012).

First, participants of the survey need to be familiar with the brands. As such, supported brand awareness of the 24 product brands and their corresponding corporate brands was investigated with the help of a pre-study conducted with N=200 adults between age of 18 and 75. As a result, the brand awareness of all brands was sufficient for using them within the survey.

We proceeded to design a questionnaire aimed at a representative sample of 1,100 adults between the age of 18 and 69. The average age was 42.6. The online questionnaire was sent in cooperation with a market research company to assure a representative distribution concerning socio-demographic criteria. The respondents were incentivized to participate in the survey. All of the respondents are aware of the brands they received, as a brand awareness filter was placed.
in advance of the survey. Multiple cases up to four pairs of brands per respondent were possible within one questionnaire (max. 4,400 cases). The data cleansing therefore focused on click-throughs measured by the average response time (less than half of the average) and missing values (more than 30%). Finally, the sample comprises 2,949 cases.

3.2 Scales measurements

The scales were drawn from previous research. The purchase intention as dependent variable was based on Grewal, Monroe and Krishnan (1998). We used a 3 item-7-point-Likert-scale: “If I were going to buy a pain killer, the probability of buying this product is...; Concerning the independent variables of the brand images of the corporate brand and the product brand we used the same scale for both brand images, referring to the certain brand: “Like/dislike”, “good/bad” and “pleasant/unpleasant” were deemed suitable descriptors of our measurement. This scale was already used by other studies in the context of advertising research and proved highly reliable (Griffith and Chen 2004). The construct was measured on a 7-point semantic differential.

The perceived scope of the product and service portfolio of the corporate brand was adapted from Chingching (2011). Finally, the perceived risk on purchasing within a product category was measured based on the 4-item-7-point-Likert-scale of Laroche et al. (2005).

3.3 Empirical results

To assess convergent and discriminant validity of our construct operationalizations we conducted a confirmatory factor analysis (CFA) using AMOS 16.0. All scales had a sufficient reliability (e.g., Cronbach’s alpha and composite reliabilities are between .93 and .98). Furthermore, all item reliabilities are above the recommended value of .40. The variance extracted was above .40 for each construct, giving evidence for convergent validity (Bagozzi and Yi 2012). We assessed the discriminant validity of the construct measures using the criterion proposed by Fornell and Larcker (1981).

The structural model was calculated with AMOS 16.0. The corporate brand image has an influence on the purchase intention ($b=.203$, $t=10.849$, $p<.001$). The product brand image has an influence on the purchase intention as well ($b=.617$, $t=32.216$, $p<.001$). These results
4. Discussion

The results of hypotheses H1 and H2 show that the multiple brand image measurement is a helpful approach for measuring perceived brand architecture. It goes beyond previous measurements with the help of the observed brand architecture. Results show that the corporate brand image plays an endorsing role across the investigated industries. Nevertheless, the behavioral relevance of the product brand image is much stronger.

The results of hypotheses H3a and H3b confirm the hypothesized relationship that product brands are getting more important the broader the perceived product and service portfolio is. In this context, a strong linkage of the product brands with the corporate brand would drive a generic positioning of the corporate brand as it cannot cover the diverse orientation of such a broad product and service portfolio. The results of hypotheses H4a and H4b do not confirm the
hypothesized relationship of brand architecture and the perceived risk on purchasing within a product category. One reason which is also one limitation of the study could be the selection of the brand stimuli. The aim was to cover a wide range of different pairs of brands within various industries. Nevertheless, the distribution of risk is rather small. Only the banking industry has a significantly higher risk than the other industries. Therefore, the risk within the investigated sample is too low and cannot separate high and low risk product categories in a proper way.

Thus, the study enables further empirical research in the field of brand architecture. A broader image analysis has to be set up for evaluating the external acceptance by different stakeholder groups besides customers. Especially for monitoring the perceived brand architecture, brand image measurements with the help of relevant brand benefits need to be applied for the different industries. This implies an extension of the image measurement referring to individual brand associations besides the overall evaluation of the brand image (Keller 1993).

Finally, revising the brand architecture is the foundation and one major step forward to guarantee a customer-oriented business approach for future commercial success. The measurement of the perceived brand architecture that is delivered in the present study helps researchers as well as practitioners in investigating their brand architecture and leading it further into the right direction.

References


Fishbein, M. and I. Ajzen (1975), Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research, Reading, MA.


