Research brand equity

Research Brand Equity is a joint project with various sub-projects where a bunch of different perspectives is involved – Innovation Research (Prof. Dr. Ellen Enkel, Jun. Prof. Dr. Marco Hubert), Marketing (Prof. Dr. Peter Kenning; Zeppelin University) and Psychology (Prof. Dr. Arnd Florack; University Vienna) – with the goal to analyze the impact of perception on a firms performance as well as economic values like willingness to pay or specific performance indicators (i.e. market value, Tobin’s q).

Relevance and motivation

The decision-making process of consumers for a specific product is often characterized by a high degree of complexity. For companies it is therefore very important to generate signals that are able to simplify the buying decision by reducing the level of complexity.

Studies have shown that a consumers perception of a firm as innovative has an evident impact on the success of a firm in new markets (Keller and Aaker, 1997, Shankar et al., 1998), the credibility and perceived expertise of the firm (Golder and Tellis, 1993), the perceived quality and buying intention for its products (Keller and Aaker, 1997) and the stability of a buyer-seller-relationship (Falkner, Wagner, 2011).

Because of the different possibilities firms have to innovate and to create new products or product extensions (Beverland, Napoli, Farrelly, 2010) the interdisciplinary combination of marketing, innovation research and consumer psychology could shed light on the importance of (perceived) innovativeness of a company. This interdisciplinary approach could also help to investigate how the perceived innovativeness of a firm depends on specific flagship-products and how the innovativeness of flagship products and the (perceived) overall innovativeness of a firm interact:

Project I: Effects of Flagship-Products on Consumer Innovativeness Perceptions of a Firm – First Insights for Three Different Industries

Theoretical background

Particularly for multi-product and high-involvement markets the development of innovative products and product extensions which satisfy consumers’ needs could be such a signal that helps the consumer to make his decision. Due to the development of innovative products the whole brand might be perceived as innovative and the firm may be able to realize a competitive advantage.

Moreover, studies investigating processes and forms of brand extensions have shown that there exist positive but also negative main, moderating and interaction effects (Keller, 2002), i.e. fit of characteristics (Aaker and Keller, 1990), similarity and dissimilarity effects, context effects (Wänke et al., 1998) or effects of prototype and exemplar fit (Mao and Shanker Krishnan, 2006) regarding the evaluation of a brand extension and its parent brand. Within this research, especially the existence of a flagship-product as distinguishing mark could generate a highly interacting impact on the perception of a specific brand (firm) and may also be able to simplify consumer decision making.

Hypotheses

Against this background, the questions arise, a) if the existence and the acknowledge of a flagship-product has an impact on the perceived innovativeness of a firm in general (H1a), b) if there exist differences between industries (H1b) and c) if the perception of the known flagship-product and the evaluation as typical has an impact on the perceived innovativeness of a firm (H2).

Method and analysis

To increase variance in perception and knowledge of different flagship-products and firms, we investigated three different industries (Cars (C), Electronics (E), and Pharmaceuticals (P)) and three different firms (C1/C2/C3, E1/E2/E3, P1/P2/P3) within each industry. Each subsample consists of 150 participants with 50 participants per known firm, which leads in consequence to a total of
450 participants. In an online-questionnaire each participant had to answer items for their specific firm-industry combination (C1/C2/ C3, E1/E2/E3, P1/P2/P3) with regard to their innovativeness perception of the firm (7 items, alpha=.950, KMO=.932, AVE=.77.125). If they know a specific flagship-product, their innovativeness perception of the known flagship-product (8 items, alpha=.975, KMO=.932, AVE=.84.998) and the interacting identification (typicality) of the flagship-product with the firm (5 items, alpha=.920, KMO=.884, AVE=.76.045). Additionally they had to answer questions regarding their individual consumer innovativeness (6 items, alpha=.910, KMO=.869, AVE=.69.455) as well as general socio-demographical questions (i.e. gender, age, net income).

The analysis included only those participants who could name respective couldn’t name a specific flagship-product (binary variable: yes, no) within their firm-industry combination. Overall, 269 participants (124 female; Mean(age)=38.94, SD=12.9, participants(C)=73; (E)=87; (P)=109) were included within the analysis. We controlled for gender differences as well as differences in age and consumer innovativeness and found no significant main effects between the industry-subsamples for gender (Chi²(2, 266)=.159, p=.924), age (F(2, 266)=.782, p=.458) and consumer innovativeness (F(2, 266)=.226, p=.798).

Results

Regarding hypothesis H1a, to measure an overall effect of knowing a flagship-product on the perceived innovativeness of a firm, we entered innovation ratings over all industries into an one-way (flagship-product: yes, no) ANOVA and found a significant main effect for flagship-product (Mean=yes)=4.896, SD=1.31; Mean=no)=4.40, SD=1.07; F(1, 267)=10.387, p<.001).

Regarding hypothesis H1b, to measure industry-dependent effects we entered innovation ratings as dependent variable into a general linear model with flagship-product (yes, no) and industry (electronics, cars, pharmaceutics) as factors and found again a significant main effect for flagship-product (Cars): Mean=yes)=4.79, SD=1.27; Mean=no)=4.40, SD=1.11; (Electronics): Mean=yes)=5.04, SD=1.52; Mean(no)=4.68, SD=1.28; (Pharmaceutics): Mean=yes)=4.79, SD=1.005; Mean(no)=4.31, SD=0.99; F(1, 267)=5.958, p=.015) but no significant main effect for industry (F(2, 266)=1.280, p=.280) as well as no significant interaction effect for flagship-product*industry (F(1, 266)=.052, p=.949)

Regarding hypothesis H2, to measure the influence of the innovativeness perception of the flagship-product and the identification with the firm, we entered innovativeness ratings of the firm as dependent variable into a general linear model with industry as factor and perceived innovativeness of a flagship-product and identification as covariates. Here we found a significant effect of the innovativeness perception of the flagship-product (F(1, 267)=8.880, p=.003) and a significant interaction effect of industry*innovativeness perception of the flagship-product*identification (F(2, 266)=3.998, p=.020). We found no main effect for industry (F(2, 266)=.2843, p=.061) and identification (F(1, 267)=3.564, p=.061) as well as no main interaction effect of innovativeness perception of a flagship-product*identification (F(1, 267)=1.933, p=.166).

Summary

These results show, that there is 1) a general relationship between a known flagship-product and the perception of a firm as innovative in general and this holds true for the industries, but 2) there is a difference between the industries on firms innovativeness perception regarding the impact of perceiving the product as innovative and additionally evaluating this product as typical for a specific brand.

In a similar vein, if we assume the importance of a firms perception as innovative we have to analyze the impact of innovativeness perceptions on economic and financial values:

Project II: Determinants of perceived innovativeness and the effect on consumer willingness to pay

Relevance and motivation

Research in marketing and innovation science shows that firm innovativeness (Rubera and Kirca, 2012) determines several economic variables such as firm values (e.g. Tobins Q, Stock Market
Performance), market values (e.g. sales, sales growth, market share) or the financial position (e.g. ROA, ROI, ROE, ROS) (Rubera and Kirca, 2012).

Furthermore, research provides evidence that from a consumer perspective the perceived innovativeness of a firm which can among others be influenced by a company’s communication strategy is positively correlated with 1) the success of a company in new markets (Keller and Aaker, 1997, Shankar, Carpenter, and Krishnamurthi, 1998), 2) the credibility and perceived expertise of a company (Golder and Tellis, 1993) 3) the perceived quality and buying intention of the products (Keller and Aaker, 1997) and 4) the stability in the buyer-seller relationship (Falkner, Wagner, 2011).

Research questions
Up to now it still remains unclear 1) which determinants drive the perception of innovativeness, 2) how investments in research and development lead to changes in the perception of consumers and other stakeholders 3) if there is a discrepancy or fit between the actual and perceived innovativeness, and 4) how actual and perceived innovativeness can add to better explain economic performance indicators.

Methods and analysis
A first study was conducted to analyze specific determinants of consumers perceived innovativeness of a firm. We investigated 450 participants, investigated three different industries (Cars, Electronics, and Pharmaceuticals) and three different firms within each industry (for more details see notes to project 1). Participants were asked within a questionnaire of how innovative they perceive the service, price setting, employees, environment, quality and marketing of a specific firm and the firm itself.

Within a second study we investigated 746 participants and 27 companies from different industries (cars, electronics, pharmaceuticals, insurances etc.). Here people were asked how they perceive the innovativeness of the given firm, the quality of the products and their general willingness to buy those products for the given firm.

Results

![Figure 1: Research model as connection of study 1 and 2](image-url)
Next Steps:

- Collection of various performance indicators, i.e. firm value, market position or financial position
- Analysis of mediating or moderation effects of the perceived innovativeness on the causal connections between firm innovativeness and firm value, market position and financial position

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