Flag up! – Flagship Products as Important Drivers of Perceived Brand Innovativeness

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1. Introduction

For companies to maintain success in competitive markets, they need to be innovative and develop new products and ideas (Banerjee & Soberman, 2013; Carbonell & Rodriguez, 2006; Eisend, Evanschitzky, & Gilliland, 2015; Pauwels, Silva-Risso, Srinivasan, & Hanssens, 2004; Rubera & Kirca, 2012). Consumers value innovations highly, and innovative products have the potential to prompt purchases (Bartels & Reinders, 2011; Peres, Muller, & Mahajan, 2010; Steenkamp, Hofstede, & Wedel, 1999). As a part of a brand image, innovativeness has a significant impact on consumer decisions and is a key driver of economic success (Kaplan, 2009; Rubera & Kirca, 2012). Hence, it is not surprising that brand innovativeness has become an essential characteristic of brand image for many global companies (Dowling, 1988; Spector, 1961; Rust, Zeithaml, & Lemon, 2004b).

A company’s investment in research and development forms the basis for perceptions of brand innovativeness (Evanschitzky, Eisend, Calantone, & Jiang, 2012; Rubera & Kirca, 2012). However, perceived brand innovativeness reflects more than investments in research and development and the number of innovative patents (Danneels & Kleinschmidt, 2001; Kaplan, 2009; Keller, 2013; Kunz, Schmitt, & Meyer, 2011; Schreier, Fuchs, & Dahl, 2012). Perceived brand innovativeness also encompasses consumers’ perceptions and subjective assessments of brands as being innovative (Beverland, Napoli, & Farely, 2010; Evanschitzky et al., 2012; Kaplan, 2009; Kunz et al., 2011; Ostlund, 1974; Rubera & Kirca, 2012; Schreier et al., 2012; Vandecasteele & Geuens, 2010). Prior research indicates that perceived brand innovativeness positively influences consumers’ attitudes toward a brand (Boisvert & Ashill, 2011; Gürhan-Canli & Batra, 2004), customer loyalty (Kunz et al., 2011), brand commitment (Eisingerich & Rubera, 2010), and the stability of a buyer-seller relationship (Falkenreck & Wagner, 2011). If the idea that objective measures of brand innovation are not always
congruent with perceived brand innovativeness is taken into account, the question of how the company’s efforts to create innovative products can be transformed into perceived brand innovativeness then arises.

Considering the importance of perceived brand innovativeness, the fact that only a little is known about the processes that determine the perception of innovativeness is surprising. Therefore, this paper focuses on the brand’s flagship product as a key signal for perceived brand innovativeness. In particular, this paper studies a) the spillover of the perceived flagship product innovativeness to perceived brand innovativeness, and b) conditions that facilitate this spillover. Researchers argue that flagship products are of key importance for companies because they often produce sales with relatively smaller marketing investments and provide a platform for the further development of the brand (John, Loken, & Joiner, 1998). Research on flagship products often focuses on the effects of extensions from the flagship product on facets of the brand image (Grime, Diamantopoulos, & Smith, G., 2002; Heath, DelVecchio, & MacCarthy, 2011; Völckner & Sattler, 2006; Völckner, Sattler, Henning-Thurau, & Ringle, 2010), the spillover of advertising effects (Balachander & Ghose, 2003), and how brand extensions affect the image of the flagship product in a positive (Supphellen, Eismann, & Hem, 2004) or negative way (John et al., 1998). However, research has not yet examined the direct effects of flagship products on perceived brand innovativeness. Furthermore, systematic research on how perceived brand innovativeness evolves from product innovation and product perceptions is rare (Kunz et al., 2011) or at least produces ambiguous results (Calantone, Chan, & Cui, 2006; Evanschitzky et al., 2012; McNally, Cavusgil, & Calantone, 2010). The current studies address this research gap and study the effects of the perceived flagship product innovativeness on perceived brand innovativeness across different product categories (e.g., bikes, cars, electronics, pharmaceuticals) and different consumer samples while also studying the typicality of the flagship product for the brand as a possible moderator of these effects.
2. Theoretical Background

To understand how consumers form an impression of the perceived brand innovativeness, researchers can apply theories on consumer information processing (Arts, Frambach, & Bijmolt, 2011; Bettman, Luce, & Payne, 1998; Shavitt & Wänke, 2001). Consumer information processing theories propose two models about how consumers integrate new information into a brand schema (Loken & John, 1993; Gürhan-Canli & Maheswaran, 1998). The bookkeeping model (e.g., Loken & John, 1993) suggests that each piece of new information leads to an incremental modification of the brand schema that is stored in memory (Balachander & Ghose, 2003). With regard to perceived brand innovativeness, this model posits that consumers update their assessment of brand innovativeness each time they perceive new information about the brand’s innovativeness.

The exemplar model (e.g., Ahluwalia & Gürhan-Canli, 2000; Chen & Chaiken, 1999; Hastie & Park, 1986) suggests that consumers retrieve exemplars from memory when they assess brands. With respect to perceived brand innovativeness, this model posits that exemplars of the brand are more important drivers of perceived brand innovativeness than single pieces of information.

Even if it is likely that single pieces of information as well as brand exemplars have some impact on perceived brand innovativeness, it is important to acknowledge that not all information stored in memory is equally accessible and relevant for consumers (Higgins, King, & Mavin, 1982; Thelen & Woodside, 1997). In particular, when consumers think about a brand, they do not have all of the brand’s products in mind. Instead, they mostly remember the products that were recently advertised (Wright & Lynch, 1995), the products that they recently used (Hoch & Deighton, 1989), or the pioneering products from a product category (Kardes, Kalyanaram, Chandrashekaran, & Dornoff, 1993). Therefore, the present work proposes that a brand’s flagship product – the product that consumers associate the most with the brand or company name (John et al., 1998) – is particularly relevant for the modification
of perceived brand innovativeness. On the basis of the exemplar model, the authors propose that the perceived flagship product innovativeness has an important impact on perceived brand innovativeness.

However, not only does research on brand perception provide evidence of spillover effects from products to the brand, but research in this area also points out the boundaries of such effects (Gürhan-Canli & Maheswaran, 1998). Indeed, researchers repeatedly argue that the positive influence of exemplars on the perception of categories depends on the typicality of the exemplars and is weakened when typicality is decreased (Bless & Schwarz, 2010; Loken & John, 1993; Milberg, Park, & McCarthy, 1997). Extant research provides support for the moderating role of the typicality on spillover effects (e.g., Aaker & Keller, 1990; Arslan & Altuna, 2010; Bhat & Reddy, 2001; Boush & Loken, 1991; Gürhan-Canli & Maheswaran, 1998; Keller, 2002; Loken & John, 1993; Mao & Krishnan, 2006; Martinez & Pina, 2003; Milberg et al., 1997; Salinas & Pérez, 2009; Völckner & Sattler, 2006; Wänke, Bless, & Igou, 2001). For example, effects of brand extensions on brand evaluation are often more distinguished for typical brands (Gürhan-Canli & Maheswaran, 1998; Keller & Aaker, 1992), especially if consumer involvement is low (Gürhan-Canli & Maheswaran, 1998). Therefore, the present study proposes that a) companies benefit from presenting an innovative product as a flagship product rather than as a standard product and b) this benefit for perceived brand innovativeness is more pronounced when the flagship product is perceived as a typical product of the brand.

3. Current Research and Hypotheses

To illustrate and support the relevance of perceived brand innovativeness for consumer behavior, the current research examines in a pilot study whether perceived brand innovativeness is correlated with buying intentions and willingness to pay across different industries (H1a, b).
**H1a, b:** An increase in the perceived brand innovativeness is positively related to (a) the intention to buy a product of the given brand and (b) the willingness to pay for that product.

The main part of the present paper consists of three studies that systematically test the impact of the perceived flagship product innovativeness on perceived brand innovativeness (figure 1). **Study 1** investigates whether the presentation of an innovative product as a flagship product has a causal effect on perceived brand innovativeness (H2a). To pursue this objective, Study 1 varies whether or not an innovative product is presented as a flagship product in a web store and whether the brand represents an established or a start-up company.

**H2a:** The presentation of an innovative product as a flagship product compared with presentation as a standard product leads to increased perceived brand innovativeness, even if the product portfolio is the same in both conditions.

While Study 1 uses a fictitious brand, **Study 2** examines the relevance of the perceived flagship product innovativeness for real brands. The objective is to validate and extend the findings of Study 1 and to provide a first test of the supposed spillover effect and the moderating role of typicality of the flagship product with real brands (H2b/H3).

**H2b:** An increase in the perceived flagship product innovativeness is positively related to perceived brand innovativeness.

**H3:** The positive effect of perceived flagship product innovativeness on perceived brand innovativeness increases with an increase in the flagship product’s typicality for the brand.

The strength of Study 2 is the measurement of perceptions of real brands, but Study 2 applies a correlational design. **Study 3** attempts to replicate the causal effect of the perceived flagship product innovativeness on perceived brand innovativeness observed in Study 1 in a different product category (pharmaceuticals) and, in addition, tests the moderating influence
of the typicality of the flagship product on perceived brand innovativeness (H3) in an experimental design. All three main studies measure consumer innovativeness and perceived expertise as control variables.

Figure 1 here

3.1. Pilot Study

The pilot study examines the correlation between perceived brand innovativeness and buying intentions (H1a) and willingness to pay for products (H1b) in different industries.

3.1.1. Sample and Design

To increase the external validity of the study (Jones, 2010) and to allow for generalizations across different age and gender groups, the research team invites participants of a survey panel in Germany to participate in the study. Seven hundred forty six participants (379 female, 367 male; $M = 43.38$ years, $SD = 14.21$ years; range: 18 to 69 years) complete the questionnaire and evaluate 14 companies (one company for each participant, randomized) from different industries (i.e., cars, electronics, pharmaceuticals, telecommunication, and insurance). The research team selects the industries that varied in their innovation potential (Reuters, 2014). Participants receive the standard reward points of the panel for their participation.

3.1.2. Procedure and Measures

The questionnaire assesses (1) perceived brand innovativeness (7 items; “In my opinion the [brand]: (...) stands for first class research; (...) is a technology leader; (...) launches many innovations; (...) employs smart people; (...) fulfills customer needs with their products; (...) will register many patents; (...) is problem solver number one”), (2) their general intention to buy a specific product from the given brand compared with other brands (4 items; “It makes sense to buy products from [company / brand] instead of any other brand, even if they are the same”; “Even if another brand has same features as products from [company / brand], I would prefer to buy products from [company / brand]”; “If there is
another brand as good as [company / brand], I prefer to buy products from [company / brand]”; “If another brand is not different from [company / brand] in any way, it seems smarter to purchase products from [company / brand]”; adapted from Yoo, Donthu, & Lee, 2000); and (3) their willingness to pay extra for products from the given brand (3 items; “For a product from [company/brand], I am willing to pay more compared with a similar product from other brands”; “For a product from [company/brand], I would pay more”; “It is worth paying more for a product from [company/brand]”) on a 7-point scale (1 = strongly disagree to 7 = strongly agree). Items are averaged into single scales for perceived brand innovativeness (M = 3.8, SD = 1.44, α = .95), intention to buy (M = 3.6, SD = 1.57, α = .92), and willingness to pay (M = 2.9, SD = 1.69, α = .98). High values indicate high perceived brand innovativeness, high intention to buy, and high willingness to pay.

3.1.3. Results and Discussion

As expected (H1a/H1b), perceived brand innovativeness is significantly correlated with intention to buy, r(746) = .64, p < .01, and willingness to pay, r(746) = .60, p < .01. These correlations match existing research on perceived brand innovativeness (Boisvert & Ashill, 2011; Gürhan-Canli & Batra, 2004; Eisingerich & Rubera, 2010; Falkenreck & Wagner, 2011) and show the relevance of perceived brand innovativeness for the selected industries.

3.2. Study 1

Companies can highlight an innovative product as a flagship product in their brand presentation or present it as a regular product. In Study 1, we investigate whether the presentation of an innovative product as a flagship product influences the perceived innovativeness of a brand (H2a). Besides presenting the flagship product as innovative or not, we vary whether the company represented by the brand is an established company or start-up to increase the generalizability of the findings for different kinds of companies.

3.2.1. Sample and Design
The research team recruits 152 male and 117 female participants ($M = 38.5$ years, $SD = 12.36$ years; range: 15 to 80 years) in Austria for an online field study. The study applies a $2 \times 2$ (product type: non-flagship product vs. flagship product) $\times$ (company type: start-up vs. established company) between-subject design. Participants are randomly assigned to one of the conditions (average number participants per condition: $M = 67.3$, $SD = 1.71$; no age differences between conditions, $F(3, 265) = 1.35, p = .26$).

3.2.2. Procedure and Measures

Participants explore the website of a fictional company named Axulo Bikes, which produces and sells bicycles (figure 2). The study displays five bicycles of the same design and size (non-flagship product condition) or four bikes of the same design and size and the most innovative of five bicycles (an e-bike) in a highlighted way (flagship product condition). In the latter condition, the display of the flagship product is 70% larger than the images of the other bikes, and the flagship product is displayed first in a list of five bicycles. The study presents all other bikes in a random order. It is important to note that the study presents the same products and information in all conditions.

Figure 2 here

In addition, the study provides participants with two different descriptions of the company type (start-up vs. established company) at the beginning of the experiment. In the startup condition, participants read that the company is three years old, making a 200,000€ turnover in the recent fiscal year and employing 20 people. In the established company condition, participants read that the company is a well-established company founded 83 years ago with a turnover of 120,000,000€ and having 320 employees. After three minutes exploring the website, participants are given the option to proceed to the questionnaire or to continue for the maximum of seven minutes.

The questionnaire starts on a separate page. Participants indicate perceived brand innovativeness of Axulo on one item (“Please evaluate how characteristically the term
‘innovative’ would fit to brand Axulo”), using 1 (not characteristic at all) and 7 (very characteristic) as scale endpoints. Also, participants indicate how innovative they perceive each bike to be (1 = not innovative to 7 = very innovative) and answer questions according to their perceived expertise (“I am an expert when it comes to bicycles”) and perceived innovativeness (“I am an expert when it comes to innovations”) with yes or no answers.

3.2.3. Results

Participants perceive the e-bike as being more innovative ($M = 5.3$, $SD = 1.55$) compared with the averaged evaluations of the four other bikes ($M = 3.3$, $SD = 1.33$), $t(268) = 20.05$, $p < .01$.

To test the hypothesis (H2a), an analysis of variance (ANOVA) is computed with perceived brand innovativeness as the dependent variable, product-type condition (non-flagship product vs. flagship product) and company-type condition (start-up vs. established company) as independent factors, and perceived expertise and perceived innovativeness as covariates. The analysis yields a significant main effect of the product-type condition, $F(1, 263) = 19.85$, $p < .01$, but no main effect of the company-type condition, $F(1, 263) = 1.14$, $p = .29$, and no interaction between the product-type and company-type conditions, $F(1, 263) = 0.51$, $p = .48$, as well as no main effects of perceived expertise, $F(1, 263) = 0.74$, $p = .39$, and perceived innovativeness, $F(1, 263) = 0.43$, $p = .51$. As hypothesized, when the innovative product is presented as a flagship product, participants rate the brand as more innovative ($M = 4.9$, $SD = 1.49$) than when the innovative product is not presented as a flagship product ($M = 4.1$, $SD = 1.48$).

3.2.4. Discussion

The results of Study 1 show that the presentation of an innovative product as a flagship product has a substantial impact on perceived brand innovativeness measured after the presentation. Even if the participants see the same products in each condition, they assess the brand Axulo as more innovative when the innovative product—the e-bike—is presented as
a flagship product. This finding supports the proposed assessment of perceived brand innovativeness that is based on a retrieval of highly accessible exemplars from memory (Gürhan-Canli, 2003; Hastie & Park, 1986, Park & Hastak, 1994). Because the information is the same in all conditions, a pure bookkeeping model would have predicted no differences between the conditions. The finding that the flagship product effect occurs independently of whether the company is a start-up or is an established company stresses the importance of flagship products for both types of companies.

3.3. Study 2

Study 2 examines whether the perceived flagship product innovativeness is positively associated with perceived brand innovativeness for real brands (H2b) in the field and whether this correlation increases as the typicality of the flagship product increases (H3). The authors argue that a flagship product is a highly accessible brand member in consumer memory and should therefore influence the judgment of perceived brand innovativeness when the flagship product is perceived as typical of the brand.

3.3.1. Sample and Design

The research team invites participants of a German online panel similar to the panel used in the pilot study to answer a questionnaire. 234 male and 216 female participants (M = 40.3 years, SD = 12.81 years; range: 16 to 65 years) complete the questionnaire. To increase the generalizability, the study investigates nine real brands from three different industries (cars, electronics, and pharmaceuticals) and assigns participants randomly to one of the nine brands. The selection of the industries is based on their innovation potential (Reuters, 2014). In addition, three focus groups (N = 27, 13 male and 14 female participants; age: M = 36.4 years, SD = 13.4; range: 18 to 65) are organized to select the real brands according to their perceived brand innovativeness and to give participants the opportunity to name a specific flagship product. In Study 2’s main analyses, participants are included only if they can name a flagship product. The sample for this analysis consists of 114 male and 80 female participants.
(age: $M = 39.5$ years, SD = 12.97; range: 16 to 65). There are no differences between the sub-samples from the selected industries (electronics, cars, and pharmaceuticals) in gender, $\chi^2(2, 194) = 0.39, p = .82$, age, $F(2, 191) = 1.74, p = .18$, and perceived consumer innovativeness, $F(2, 191) = 0.38, p = .68$.

3.3.2. Procedure and Measures

First, participants report the perceived brand innovativeness (7 items; “In my opinion the [brand]: (...) stands for first class research; (...) is a technology leader; (...) launches many innovations; (...) employs smart people; (...) fulfills customer needs with their products; (...) will register many patents; (...) is problem solver number one”) on a 7-point scale with 1 (strongly disagree) and 7 (strongly agree) as endpoints. The items are averaged into a single scale for perceived brand innovativeness. In addition, participants indicate whether or not they know and can name a specific flagship product from the given brand.

When participants can name a flagship product, they indicate (1) the flagship product – brand association (1 item; “If I think about [brand], the [product] immediately comes to my mind”), (2) the perceived flagship product innovativeness (1 item: “The [product] itself stands for innovativeness”), (3) the perceived typicality of the flagship product (2 items: “The [product] is absolutely typical of [brand]” and “If you ask other people they would say that [product] is characteristic of [brand]”), perceived expertise for the given industry (3 items: “I know pretty much about [product],” “I feel very knowledgeable about [product],” and “Among my circle of friends, I’m one of the experts on [product]”; adapted from Flynn & Goldsmith, 1999), and (4) perceived consumer innovativeness (4 items: “Other people come to you for advice on new technologies,” “It seems that your friends are learning more than you are about the newest technologies,” “In general, you are among the first in your circle of friends to acquire new technologies when they appear,” and “You can usually figure out new high-tech products and services without help from others”; adapted from Parasuraman, 2000).
These items are answered on a 7-point scale (1 = strongly disagree; 7 = strongly agree). The items are averaged into a single scale for each construct (see table 1 for descriptive statistics).

Table 1 here

3.3.3. Results

Indicating that the flagship product is highly accessible in memory, participants report that the flagship product comes to mind easily (one sample t-test against four (neutral point) as a test value; \( M = 5.7, SD = 1.40, t(193) = 17.04, p < .01 \)).

To investigate effects of the perceived flagship product innovativeness and perceived typicality on perceived brand innovativeness (H2b/H3), a moderated regression analysis (process toolbox, model 1; Hayes, 2012; 2013) is computed with perceived brand innovativeness as the dependent variable, perceived flagship product innovativeness as the independent variable, perceived typicality of the flagship product as a moderator, and the industry, perceived consumer innovativeness, and perceived expertise as control variables (table 2). All variables are standardized, and the products are mean-centered.

Table 2 here

The analysis yields a significant positive effect of perceived flagship product innovativeness, \( \beta = .51, t(192) = 6.84, p < .01 \), and perceived typicality, \( \beta = .15, t(192) = 2.07, p = .040 \), on perceived brand innovativeness, but the interaction between perceived flagship product innovativeness and perceived typicality is not significant, \( \beta = -.08, t(191) = -1.45, p = .15 \).

3.3.4. Discussion

The results are congruent with the expectation that perceived flagship product innovativeness positively affects perceived brand innovativeness (H2b). In contrast to the third hypothesis (H3), the perceived typicality of the flagship product does not moderate the correlation between the perceived flagship product innovativeness and perceived brand...
innovativeness. This result suggests that typicality is less important than implied by typicality-based models (e.g., Loken & John, 1993). However, the very high typicality assessments with only moderate variance ($M = 5.6$, $SD = 1.30$) might have obscured a moderation effect of typicality that might occur when typicality assessments are at a lower level. Study 3 therefore examines the potential moderating effect of typicality with an experimental manipulation of typicality.

3.4. Study 3

To examine the potential moderating role of perceived typicality in more detail (H3), Study 3 varies the price of the flagship product. Since flagship products can be sold at an atypically high price level compared with standard products, it is important to know whether the absence of price-based typicality can impede the spillover effect from the flagship product to the brand.

3.4.1. Sample and Design

The research team invites participants in Austria by e-mail or by Facebook to answer an online questionnaire. 79 male and 124 female participants ($M = 30.9$ years, $SD = 14.73$; range: 17 to 79) complete the questionnaire about a fictitious brand called Schleswig that provides medical treatments against cancer. Participants are randomly assigned to a $2 \times 2 \times 2$ experimental design (figure 3) with an innovativeness condition (innovative vs. non-innovative flagship product), a price condition for the flagship product (low vs. high price), and the brand portfolio price condition (low vs. high price). Participants are randomly assigned to one of the eight experimental groups (no age differences between groups; $F(7, 195) = 0.66$, $p = .71$).

The study varies innovativeness by presenting a product as either innovative (“This product from the pharmacy brand Schleswig is part of a broad assortment and was recently introduced to the market in a new form after steady research showed new results. The effect of this compound on the market is absolutely new”) or non-innovative (“This product from
the pharmacy brand *Schleswig* is part of a broad assortment and has existed in the same form for many years. This product is established on the market, and the effect of this compound is comparable to the effects of other products”.

To keep the innovativeness of the presented brand portfolio similar between the scenarios, the study varies the innovativeness of a standard product (*contrast product*) in the opposite direction from the flagship product. When the flagship product is presented as innovative, the contrast product is presented as non-innovative, and vice versa. For all other standard products (3 products = *brand portfolio*), the description is held constant across the conditions.

To generate high or low typicality of the flagship product, the study varies the price of the flagship product and the other products of the brand portfolio. Hence, the study allows for a test of typicality effects at high and low price levels. In the condition of a high flagship product price, the flagship product is priced at 815.05€. In the low flagship product price condition, the flagship product is priced at 115.05€. In the high brand portfolio price condition, the standard brand products are priced between 802€ and 813.30€. In the low brand portfolio price condition, the standard brand products are priced between 102€ and 118.30€.

**Figure 3 here**

### 3.4.2. Procedure and Measures

After an introduction to the experiment, participants are given five pages with a product image and information about the product in a randomized order. The first page always depicts the flagship product. The flagship product is highlighted with a red frame and described as the brand’s flagship product (“This product is the flagship product of the brand *Schleswig*”). Participants are given the following four pages about the other products in a randomized order. In all experimental conditions, the same information pages are shown. Figure 4 shows the product images.

**Figure 4 here**
After participants view all product descriptions, they indicate (1) the perceived 
(flagship) product innovativeness (1 item: “How do you evaluate the innovativeness of the 
product?” with 1 = not innovative to 7 = very innovative), (2) perceived brand innovativeness 
(1 item: “How do you evaluate the innovativeness of the brand?” with 1 = not innovative to 7 
= very innovative), (3) perceived expertise for the given industry (1 item: “How do you 
evaluate your expertise with regard to pharmaceuticals?” with 1 = very low expertise to 7 = 
very high expertise), and (4) perceived consumer innovativeness (4 items, “Other people come 
to you for advice on new technologies,” “It seems that your friends are learning more than 
you are about the newest technologies,” “In general, you are among the first in your circle of 
friends to acquire new technologies when they appear,” and “You can usually figure out new 
high-tech products and services without help from others”; adopted from Parasuraman (2000), 
with 1 = strongly disagree to 7 = strongly agree; α = .76). Finally, participants answer 
questions about product usage and demographic information.

3.4.3. Results

Preliminary analyses are computed to check the intended effect of the innovativeness 
manipulation for the flagship and contrast products. As expected, participants perceive the 
flagship product as more innovative (M = 5.1, SD = 1.56) when it is presented as innovative 
than when it is presented as non-innovative (M = 3; SD = 1.48), t(201) = 9.78, p < .01. 
Similarly, participants evaluate the contrast product as more innovative (M = 4.9, SD = 1.65) 
when it is presented as innovative than when it is presented as non-innovative (M = 3.2, SD = 
1.46), t(201) = 7.92, p < .01. The price of the flagship product has no effect on the perceived 
flagship product innovativeness, t(201) = 0.65, p = .52.

To test whether low compared with high typicality of the price level impedes the 
spillover from the innovative flagship product to the brand, a contrast on perceived brand 
innovativeness is computed for the innovative flagship product condition between the low 
typicality conditions (price level of the flagship product and the brand portfolio on a different
level) and the high typicality conditions (price level of the flagship product and the brand portfolio on the same level). In the innovative flagship product condition, participants perceive the brand as less innovative under low typicality conditions ($M = 3.4, SD = 1.41$) than under high typicality conditions ($M = 4.1, SD = 1.43$), $t(93) = 2.34, p = .02$. In the non-innovative flagship product condition, the same contrast is not significant, $t(106) = 0.04, p = .97$. The results of an ANOVA with perceived brand innovativeness as the dependent measure yield corresponding results. The interaction between the price level of the flagship product (low vs. high price level) and the price level of the brand portfolio (low vs. high price level) is significant for the innovative flagship product, $F(1, 89) = 5.47, p = .02$, but not for the non-innovative flagship product, $F(1, 102) < 1, ns$. The three-way interaction between all experimental factors is marginally significant, $F(1, 193) = 2.72, p = .10$.

To further test the specific hypotheses about the correlation between the perceived flagship product innovativeness and perceived brand innovativeness in more detail (H2b, H3), the study applies a moderated regression analysis (process toolbox; model 3; Hayes, 2012; 2013) with the perceived flagship product innovativeness as the independent variable, the price of the flagship product and the price of the brand portfolio as moderators, and perceived brand innovativeness as the dependent variable. Perceived consumer innovativeness and perceived expertise are added as control variables. All variables are standardized, and the products are mean-centered. The regression analysis yields a significant main effect of perceived flagship product innovativeness on perceived brand innovativeness, $\beta = .42, t(201) = 6.71, p < .01$. Participants rate the brand as more innovative when the flagship product is perceived as innovative. In addition, the regression analysis yields a significant three-way interaction between perceived flagship product innovativeness, price condition of the flagship product, and the price condition of the brand portfolio, $\beta = .17, t(199) = 2.6, p = .01$ (see table 3).

Table 3 here
The predicted typicality effect—a fit between flagship product price and brand portfolio price—is observed only for the high price brand portfolio, $\beta = .25$, $t(199) = 3.04$, $p < .01$. When the price of the flagship product and the brand portfolio is set at a high price level, the perceived flagship product innovativeness leads to an increase in perceived brand innovativeness, $\beta = .72$, $t(199) = 6.18$, $p < .01$. When the price of the flagship product is set at an atypically low level compared with the brand portfolio, the perceived flagship product innovativeness is not significantly transferred to the brand, $\beta = .21$, $t(199) = 1.74$, $p = .08$.

By contrast, when the brand portfolio prices are at a low level, the effect of the perceived flagship product innovativeness is not affected by whether the price of the flagship product is low (and typical), $\beta = .46$, $t(199) = 3.49$, $p < .01$, or high (and atypical), $\beta = .30$, $t(199) = 2.12$, $p = .03$ (see figure 5). Unexpectedly, the spillover from the flagship product occurs in both of the mentioned conditions, and the moderating effect of typicality is not significant, $\beta = -.08$, $t(199) = -.81$, $p = .42$ (see figure 5).

Figure 5 here

3.4.4. Discussion

Study 3 successfully replicates Study 1’s finding that the presentation of an innovative product as a flagship product causally contributes to perceived brand innovativeness. Even if the information that participants receive about the innovativeness of the brand products is the same in all conditions, participants perceive the brand as more innovative when the flagship product is innovative than they do when one of the standard products is innovative (H2a). Because a flagship product is included in all conditions, the present study can rule out the possibility that the mere presence of a flagship product – independent of the innovativeness of the flagship product – is responsible for the effect.

As expected, the innovativeness of the standard product does not affect perceived brand innovativeness as much as it does the perceived flagship product innovativeness. Thus, the findings of Study 3 provide further support for the prediction that judgments of perceived
brand innovativeness are not based on all of the information that is received as a
bookkeeping model would suggest but are based on information about the flagship product.
Because participants see the information for each product on a separate page, we can rule out
the possibility that participants do not note that one of the standard products is innovative in
one condition. Indeed, the standard product is rated as being more innovative when it is
presented as being innovative than when it is not presented as innovative.

In an extension of Study 2, Study 3 shows that typicality of the flagship product
moderates the effect of the flagship product under certain conditions. When the price level of
the brand portfolio is high, the spillover effect of perceived flagship product innovativeness to
the brand is particularly strong when the price of the flagship product is high and typical of
the brand portfolio, but the spillover effect is reduced when the price of the flagship product is
atypically low. Thus, a downward deviation in the price of the flagship product from the
typical prices of the brand portfolio impedes the spillover effect. However, when the price
level of the brand portfolio is low, an atypically high price for the flagship product does not
reduce the spillover effect.

4. General Discussion

Previous research has established that innovativeness is important for the success of
compaines (Rubera & Kirca, 2012). However, results of previous studies vary significantly on
the issue of whether or not such investments lead to economic success (Evanschitzky et al.,
2012). Reasons for the discrepancy between the perception of a brand as innovative and the
development of innovations is that consumers are not aware of all of a brand’s innovations,
and they do not keep track of all of a brand’s innovations. The present work contrasts a
bookkeeping approach with an approach that proposes that innovativeness judgments are
constructed on the basis of flagship products as representative exemplars of brands
(Ahluwalia & Gürhan-Canli, 2000) and shows in three studies that the perceived flagship
products innovativeness is a key driver of perceived brand innovativeness. Study 2 finds that
the perceived flagship products innovativeness of real brands in different industries is correlated with perceived brand innovativeness (H2b). Studies 1 and 3 reveal that the presentation of an innovative flagship product has a causal effect on perceived brand innovativeness.

The present work suggests that a bookkeeping model of the integration of information into the brand schema is not sufficient to explain how consumers judge a brand’s innovativeness. A bookkeeping model of consumer information processing would suggest that consumers continually update perceived brand innovativeness when they perceive new information that is relevant for this assessment (Balachander & Ghose, 2003; Loken & John, 1993). However, in Studies 1 and 3, all participants receive the same information about the brand but differ in perceived brand innovativeness when the presentation of the flagship product differs. Participants indicate a higher perceived brand innovativeness when an innovative product included in the brand portfolio is presented as a flagship product than when it is not presented as a flagship product. A bookkeeping model would have predicted that participants would base their judgment of perceived brand innovativeness on the information they received that is relevant for this judgment irrespective of whether this information is associated with a flagship or standard product. However, the perceived innovativeness of a standard product obviously does not affect perceived brand innovativeness as much as the perceived flagship product innovativeness does. While the results of the present studies are not congruent with a bookkeeping model, they are in line with the assumption that consumers rely on flagship products as prominent exemplars of the brand when they form a judgment of perceived brand innovativeness (Ahluwalia & Gürhan-Canli, 2000; Chen & Chaiken, 1999; Hastie & Park, 1986).

The present research furthermore studies typicality as a potential moderator of the effects of flagship products on perceived brand innovativeness. Indeed, information processing theories consider typicality to be an important variable that facilitates assimilation
in judgments (e.g., Bless & Schwarz, 2010). However, the present research finds only partial support for the hypothesis that typicality moderates the effect of the perceived flagship product innovativeness on perceived brand innovativeness. In Study 3, the spillover effect from the flagship product to the brand is high when the price level of the brand portfolio is high and the flagship product is offered for a typically high price. But the spillover effect is reduced when the flagship product is sold at an atypically low price. This moderating effect of typicality of the flagship product price is in line with the predictions. However, the fact that the impeding effect of low typicality does not occur when the study presents the flagship product with an atypically high price should be taken into account. A possible explanation for this finding is that consumers are used to seeing high prices for flagship products and that only atypically low prices for flagship products grab attention and lead to an exclusion of information about the flagship product from the representation of the brand. Indeed, participants might be skeptical if a flagship product with an atypically low price is presented as being innovative. If the fact that Study 2 finds no moderating effect of typicality for the correlation between the perceived innovativeness of the flagship product and perceived brand innovativeness for the real brands is taken into account, the present work does not imply that typicality is a strong moderator of the spillover from flagship products to the brand but that an atypically low price of a flagship product might indeed impede the spillover from the flagship product to the brand.

Companies can benefit from the results of the present studies by recognizing the added value of perceived brand innovativeness for market success and the importance of integrating flagship product(s) into their product and portfolio management. Brand managers should articulate how and with what intensity a company should communicate its existing flagship products and how the observed spillover effects on brand perceptions could be profitably integrated. They might consider asymmetric advertising budgets and a stronger concentration on flagship products and their innovativeness (Balachander & Ghose, 2003).
A limitation of the present research is that, for economic reasons, the studies do not vary typicality on several different attributes. Study 3 varies typicality on the price level, which is a very specific attribute, and Study 2 measures general typicality. However, typicality can be established on many different attributes and levels (Mao & Krishnan, 2006). Other attributes that are more directly related to consumer expectations toward the brand or that are related to the design or the name of products might have different effects than that of price. Future studies might focus on different aspects of typicality as a potential moderator of the impact of the perceived flagship product innovativeness on perceived brand innovativeness.
5. References


6. Tables and Figures

**Table 1. Descriptive Statistics (Study 2)**

<table>
<thead>
<tr>
<th>Construct</th>
<th>No. of Items</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Brand Innovativeness</td>
<td>7</td>
<td>5</td>
<td>1.27</td>
<td>.95</td>
</tr>
<tr>
<td>Perceived Innovativeness</td>
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<td>5</td>
<td>1.45</td>
<td>.95</td>
</tr>
<tr>
<td>(Flagship Product)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typicality</td>
<td>2</td>
<td>5.6</td>
<td>1.30</td>
<td>.87</td>
</tr>
<tr>
<td>Expertise</td>
<td>3</td>
<td>4</td>
<td>1.49</td>
<td>.92</td>
</tr>
<tr>
<td>Consumer Innovativeness</td>
<td>4</td>
<td>4.1</td>
<td>1.07</td>
<td>.62</td>
</tr>
</tbody>
</table>

**Table 2. Multiple Regression Analysis Predicting Perceived Brand Innovativeness from Perceived Flagship Product Innovativeness and Typicality. Industry, Consumer Innovativeness, and Expertise are Control Variables.**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Innovativeness of the Flagship Product (PI)</td>
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<td>6.84</td>
<td>&lt;.01</td>
<td>.36</td>
<td>.65</td>
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<tr>
<td>Typicality (T)</td>
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<td>.01</td>
<td>.29</td>
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<tr>
<td>PI x T</td>
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<td>-1.45</td>
<td>.15</td>
<td>-.18</td>
<td>.03</td>
</tr>
<tr>
<td>Industry</td>
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<td>-0.91</td>
<td>.37</td>
<td>-.18</td>
<td>.07</td>
</tr>
<tr>
<td>Consumer Innovativeness</td>
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<td>-0.77</td>
<td>.44</td>
<td>-.19</td>
<td>.08</td>
</tr>
<tr>
<td>Expertise</td>
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<td>-0.41</td>
<td>.68</td>
<td>-.18</td>
<td>.12</td>
</tr>
</tbody>
</table>

*Note. $R^2 = .33$, $F(6, 187) = 15.29, p < .001$*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Innovativeness of the Flagship Product (PI)</td>
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<td>6.71</td>
<td>&lt;.01</td>
<td>.30</td>
<td>.55</td>
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<td>.50</td>
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<td>.08</td>
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<tr>
<td>Price Condition Brand Portfolio (PC_BP)</td>
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<td>-.94</td>
<td>.34</td>
<td>-.18</td>
<td>.06</td>
</tr>
<tr>
<td>PI x PC_FSP</td>
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<td>1.52</td>
<td>.13</td>
<td>-.03</td>
<td>.22</td>
</tr>
<tr>
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<td>.55</td>
<td>-.09</td>
<td>.17</td>
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<tr>
<td>PC_FSP * PC_BP</td>
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</tr>
<tr>
<td>PI* PC_FSP * PC_BP</td>
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<td>2.60</td>
<td>.01</td>
<td>.04</td>
<td>.29</td>
</tr>
<tr>
<td>Consumer Innovativeness</td>
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<td>-.61</td>
<td>.55</td>
<td>-.17</td>
<td>.17</td>
</tr>
<tr>
<td>Expertise</td>
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<td>0.71</td>
<td>.48</td>
<td>-.08</td>
<td>.17</td>
</tr>
</tbody>
</table>

Note. $R^2 = .25$, $F(9, 193) = 7.1015, p < .001$

Figure 1. Setup of Studies and hypotheses
Figure 2. (a) Product Description of the Innovative Product in All Conditions, (b) Product Type Condition with No Flagship Product Presentation, and (c) Product Type Condition with Flagship Product Presentation. Description did not vary between Established Company and Start-Up.

Figure 3. Example of the Brand Portfolio Price Condition with Low Prices
Figure 4. Product Image for the Fictitious Pharmaceutical Brand “Schleswig”

Figure 5. Perceived Brand Innovativeness as a Function of Perceived Flagship Product (FSP) Innovativeness, the FSP Price Condition (Low vs. High Prices), and Brand Portfolio Price Condition (Low vs. High Prices)