A Model of the Feedback Effect of Brand-Extensions on Parent-Brands

Abhishek Dwivedi, Bill Merrilees, Arthur Sweeney, Griffith University

Abstract

This paper is an outcome of the suggestion made by Keller and Sood (2003) that there is a need for a model that collates the existing research on brand-extension feedback effects. The research is generally underdeveloped, being the most recent phase in brand extension understanding. The literature lack a consensus as to key influences on feedback effects and some of the factors, such as familiarity, have been ambiguous in empirical studies. A model is developed and tested with a medium sized student sample. The results extend previous understanding the feedback effect on the parent brand.

Introduction

A brand-extension strategy takes an established brand into a new related or unrelated product category, in order to capitalize on the equity of the core brand name (Chung and Lavack, 1996; Zimmer and Bhat, 2004). It is a common practice born out the hope of leveraging trust and lowering introduction costs (McCarthy, Heath and Milberg, 2001; Meyvis and Janiszewski, 2004). This is because marketing directors are unwilling to take risks on a new brand when an already successful brand could potentially work in a new category (Brand Strategy, 2004/05). Famous examples include Mont Blanc perfumes and jewellery, Harley Davidson and Oakley footwear, Barbie cosmetics, Starbucks ice creams, Yamaha tennis racquets and Ferrari laptops and cameras. The age of specialism is over (Ritson, 2005), and the popularity of brand extensions has led to a plethora of research since the seminal studies of Boush et al. (1987) and Aaker and Keller (1990).

Brand extensions produce feedback effects that may enhance or diminish the equity of the parent brand (Swaminathan, Fox and Reddy, 2001). The feedback impact of the extension could be positive if it reinforces or enhances the image of the parent brand (Tauber, 1988) or negative if the new associations damage consumers’ attitudes towards the parent brand (Ries and Trout, 1986). Indeed, practitioners are concerned about the latter, that is, the dilution of parent brand equity (Keller, 2003; Morrin, 1999). Complicating the issue is the risk of damage to the parent brand even if the extension is successful (Farquhar, 1989). This occurs because the extension redefines the existing parent brand-category by creating new associations that lead to the modification of the schema or the brand meaning (Keller and Sood, 2003). Another possibility is that a successful brand extension indirectly dilutes a parent brand’s equity by conceptually separating the parent and extension categories and by improving the customer evaluation of a “counterextension” (a competing brand) in the parent-brand’s product category (Kumar, 2005).

Several studies in the literature have addressed the feedback impact of extensions on the core brand, but there does not appear to be a consensus on how and what. Furthermore, there has been no attempt to consolidate existing research on the feedback effects and simultaneously model the relationships previously presented in literature, although brand pioneers have called for this (Keller and Sood, 2003). Accordingly, this study develops and tests a model of the feedback effect of brand-extensions on core-brands from prior research.
Theoretical Background

According to Keller’s (2003) consumer-based brand equity (CBBE) model, the power of the brand lies in the customer’s mind, and is developed as a result of experience and accumulation of knowledge about the brand. These brand associations are a key component of brand-equity and are incorporated in commercial calculations of brand equity through brand name awareness measures (Aaker, 1990; Morrin, 1999). Further, the associative-network memory theory (Anderson 1983) has been useful in analysing the effect of brand associations. According to this theory, knowledge about a brand is a network of nodes or concepts connected by links, which represent the association between the concepts. Whenever a brand extension is launched, it activates the brand node and thus a link back to the parent is created, leading to a feedback effect of the brand extension (Balachander and Ghose, 2003). Thus, brand-extensions may change consumers’ beliefs about the parent-brand because they create new associations that may either destabilise or strengthen the existing associations leading to brand-equity dilution or enhancement.

Specifically, new associations are consistent with either a sub-typing model or a bookkeeping model of schema modification (the parent brand and its existing products) (Gurhan-Canli and Maheswaran, 1998). A sub-typing model suggests that a brand-extension that is considered atypical of the parent-brand category limits the impact of extreme incongruent information on the schema thus minimising feedback impact of the extension. In contrast, the bookkeeping model postulates that each piece of new information leads to an incremental modification of the schema, regardless of the typicality. In other words, consumers constantly update the schema as newer extensions are launched.

Moreover, experts, who have a much higher amount of experience and knowledge of a brand than novices, are more likely to follow the bookkeeping model when evaluating the parent-brand. Literature supports this viewpoint as experts have been shown to use piecemeal processing whereas novices process new information much like they process information that is consistent with category-based knowledge (Bettman & Park 1980; Bettman & Sujan 1987; Roy & Cornwell 2004). Experts differ from novices in the amount, content and the organization of their knowledge and these differences in knowledge are reflected in various information processing activities including making judgments (Mitchell & Dacin, 1996). Further, Cohen and Basu (1987) posit that expertise also impacts categorization judgments of consumers, thus leading to a different magnitude of attitude formation in case of experts and novices. As a result, the feedback impact would be higher for experts. On the other hand, novices evaluate atypical information about the brand extension in line with the sub-typing model leading to minimal feedback effect. In other words, the higher the expertise, the higher the feedback effect (Roy & Cornwell, 2004; Sujan, 1985). Thus, on the basis of the preceding discussion, the following hypothesis is proposed:

H1: Higher consumer-expertise leads to a greater feedback effect from extension to the core-brand.

Secondly, parent-brand familiarity, which is a dimension of knowledge or consumer expertise (Alba and Hutchinson, 1987), moderates the feedback effect from the extension to the parent brand. Shienin (2000) showed that with familiar brands, there was no effect of brand extensions on parent-brand beliefs and attitudes irrespective of a positive or a negative experience with the extension. Consumer beliefs were “stable” in this case. On the other hand, Thorbjorsnen (2005) found evidence that feedback effect would be greater for familiar brands.
than less familiar brands. This is because for highly familiar brands consumers follow the more effortful bookkeeping model and thus feedback would be greater. Thus the effect of familiarity in the literature is ambiguous and this leads to our second hypothesis.

**H 2:** Higher brand familiarity may lead to a higher or lower feedback effect from extension to the core-brand.

Finally, contextual factors affecting feedback effect of brand extension on parent-brands haven’t been discussed in the literature despite their importance. The contextual factors surrounding the evaluation of an object impact consumer judgments (Meyers-Levy and Sternthal, 1993; Meyers-Levy and Malaviya, 1999). In our case, the amount of feedback on the parent-brand from the brand extension will also depend on the context in which the extension is being evaluated. Contextual factors affect judgments through two routes — **contrast** and **assimilation** affects (Meyers-Levy and Sternthal, 1993). When the evaluation of an object moves away from the point of reference, **contrast effect** occurs and when it moves towards a contextual anchoring point, **assimilation effect** takes place.

Specifically, **assimilation** occurs when consumers do not have to devote considerable cognitive resources to processing product information. **Contrast** on the other hand occurs when consumers have to devote considerable cognitive resources while processing product information. By drawing on the Elaboration Likelihood Model, we can posit that **assimilation** requires a central and critical elaboration of the information that may lead consumers to adopt the bookkeeping model. This in turn means, greater feedback to the parent brand. On the other hand, **contrast** effects follow more of a peripheral route and leading to a lesser feedback effect after extension launch. This leads to hypothesis 3:

**H 3:** Contextual factors that follow the assimilation (vs. contrast) route lead to a higher (vs. lower) feedback effect from extension to the core-brand.

**Research Design**

The theoretical model has been applied to a convenience sample of university students. A written survey instrument was used, drawing on items and multi-item scales from the literature (including Keller and Aaker, 1992; Sheinin 2000). The structure of the questionnaire included some initial items about their attitude to the Billabong brand [e.g. **according to me Billabong is a great brand**]; familiarity about Billabong [e.g. **I know a lot about Billabong products**]; expertise about energy drink products [e.g. **I feel very knowledgeable about energy drink products**]; attitude to a hypothetical brand extension by Billabong into energy drinks [e.g. **my attitude towards Billabong Energy Drink is very positive**]; fit of the brand extension [e.g. **Billabong’s extension from clothing/apparel to energy drinks makes sense**]; purchase intention [e.g. **when available I would be curious to try the Billabong Energy Drink**]; and effect of brand extension on change in attitude to the billabong brand [same items as in initial brand attitude to Billabong but now expressed as a change]. Most of the scales were a Likert seven-point scale anchored as strongly disagree (1) and strongly agree (7). The scales used to measure the change in attitude to the parent brand as a consequence of the brand extension were a seven point scale, anchored as **more strongly negative change in attitude to Billabong as compared to before** (1) and **more strongly positive change in attitude towards Billabong as compared to before** (7), with a mid-point of **no change** in attitude towards Billabong as compared to before (4). It was felt best to directly measure the **change in attitude** in the parent brand as the best way to measure feedback effects, to avoid noise that would arise in the measure of the **level** of parent brand attitude, after and
before the change (and then measure the difference in the level of the parent brand attitude). The results suggest that the direct measure of feedback effect has worked well. Table 1 below reports the scales used in the study along with their sources from the literature.

Table 1: Constructs and their sources used in this study

<table>
<thead>
<tr>
<th>Construct</th>
<th>Adapted from</th>
<th>No. of items in the scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards the parent brand</td>
<td>Simonin and Ruth (1998); Zimmer and Bhat (2004)</td>
<td>5</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>Delgado-Ballester and Munuera-Aleman (2005); Chadhuri and Holbrook (2001)</td>
<td>4</td>
</tr>
<tr>
<td>Familiarity of the parent brand</td>
<td>Sheinin (2000)</td>
<td>2</td>
</tr>
<tr>
<td>Expertise about the extension category (subjective)</td>
<td>Flynn and Goldsmith (1999)</td>
<td>4</td>
</tr>
<tr>
<td>Attitude towards the brand-extension</td>
<td>Lane and Jacobson (1997); Park, Milberg and Lawson (1991)</td>
<td>5</td>
</tr>
<tr>
<td>Fit</td>
<td>Dawar (1996); Bhat and Reddy (2001)</td>
<td>4</td>
</tr>
<tr>
<td>Unexpectedness/Congruency</td>
<td>Lane and Jacobson (1997)</td>
<td>2</td>
</tr>
<tr>
<td>Cognitive effort</td>
<td>Self-constructed by referring to Garbarino and Edell (1997)</td>
<td>2</td>
</tr>
<tr>
<td>Intention to purchase the extension</td>
<td>Taylor &amp; Bearden (2002)</td>
<td>2</td>
</tr>
<tr>
<td>Post-extension change in parent-brand attitude</td>
<td>Self-constructed</td>
<td>5</td>
</tr>
<tr>
<td>Intention to purchase the parent-brand</td>
<td>Bhat and Reddy (2001)</td>
<td>2</td>
</tr>
</tbody>
</table>

Participation in the survey was voluntary, without coercion. Most of the sample of respondents was 18-25 years old. This age group was deemed to be appropriate for the company under consideration, Billabong, which is familiar to many students. The scenario for the survey was a brand extension for Billabong into energy drinks. Responses were received from 150 students, which gives sufficient statistical power for multiple regression analysis, the chosen method of analysis. All scales were found to be reliable, usually with a Cronbach Alpha greater than 0.8. Three multiple regressions were planned. Firstly, the attitude to the brand extension was explained in terms of traditional variables, such as fit of the extension with the parent brand. Secondly, the feedback effect (change in the parent brand attitude as a consequence of the brand extension) was explained in terms of the attitude to the brand extension, expertise, fit and familiarity. Thirdly intention to purchase the energy drink was explained.

Results
The attitude to the brand-extension regression was adequately explained, with an adjusted $R^2$ value of 0.50. Three variables were statistically significant, the greatest influence coming from fit with a standardised beta coefficient of 0.55 and a t-value of 9.36. This effect was statistically significant at the one percent level. Brand attitude to the parent brand was the next most important influence, with a beta coefficient of 0.28 and a t-value of 4.72 (significant at the 0.01 level). The only other variable significant was expertise, with a beta coefficient of 0.21 and a t-value of 3.55 (significant at 0.01 level). These results are consistent with the brand extension literature, which emphasise fit and quality (measured here through the brand attitude variable).

The success in explaining attitude to the brand extension gives us confidence to proceed to the next and final stage, namely explaining the feedback effect of the brand extension on the parent brand. For this situation, expertise dropped out of the explanation with an insignificant coefficient. Three variables remained, namely fit, attitude to the brand extension and familiarity with the parent brand. The $R^2$ value was 0.40, which is a satisfactory level of explanation in the variance of the dependent variable. Fit was the most important determinant, with a beta coefficient of 0.40 and a t-value of 4.91 (significant at the 0.01 level). Attitude to the brand extension was almost as powerful as a determinant, with a beta coefficient of 0.34 and a t-value of 3.96 (significant at the 0.01 level). The third influence was familiarity, which interestingly had a negative coefficient of 0.18 and a t-value of minus 2.62 (sig. at 0.010). Recall that the previous literature had been ambiguous with respect to this influence. Finally, the model has predictive validity in that the change in parent brand attitude contributed to the explanation of purchase intention of the energy drink, behind two other influences: attitude to the brand extension and expertise. All three were statistically significant at the 0.01 level. The $R^2$ value was 0.25 in this case.

**Discussion**

The results for explaining attitude to the brand extension are consistent with the literature and enable us to focus on the relatively under-researched parent brand feedback effect. It was expected that a positive attitude to the brand extension would lead to positive feedback effects. It was also expected that fit would play a role with feedback effects, though it was unknown that it would be the most important determinant of feedback effects. So fit was not only the most important influence on attitude to the brand extension, it was also the most important influence on the feedback effect on the parent brand. The third influence on the feedback effect, familiarity, was interesting because it had a negative sign. That is, the stronger the familiarity, the more likely the feedback effect would be negative. This influence is the weakest effect, but it does suggest that it is a conservative or stabilising force that reduces the benefit of brand extensions. Such a negative influence is acting as a brand protection effect, constraining to some degree any tendency of the firm to “dilute” the power of the initial brand position. Only if the attitude to the brand extension were sufficiently positive (as it is in the current scenario) would it outweigh the constraining factor, and lead to net benefits in the parent brand. No previous study has discerned this type of brand protection behaviour in the minds of consumers. Further studies are needed to replicate this result before we can generalise it. The way we have measured the feedback effect on the parent brand may have facilitated this richer understanding of different determinants compared to the previous literature.

**References**


