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Consumer responses to brand elimination: An attributional perspective

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Abstract

While research on innovation and new product development abounds in the literature, studies on firms deleting brands from their portfolio are virtually non-existent. This paper provides a pioneering examination of how brand elimination might influence consumer evaluations of the firm. As compared to a widely-held belief that brand elimination would adversely affect firm image, we propose that in situations where brand elimination can be viewed as the firm's effort to improve performance, consumers will rate this action favorably, with concomitant outcomes relating to firm evaluation. These ideas are supported in three studies. Study 1 finds that elimination targeting a weak (vs. strong) brand is more likely to be associated with eliminate-to-improve attributions, and consequently, more favorable evaluations. Study 2 shows that explanations provided by the firm (as against explanations generated internally by the consumers) help consumers make positive attributions for elimination targeting a strong brand, but lower evaluations when a weak brand is being eliminated. Study 3 establishes that loyal consumers are more likely to assess the applicability of an 'eliminate-to-improve' attribution and give favorable evaluations only when the eliminated brand is weak. Non-loyal consumers in general respond favorably to the elimination, regardless of brand strength. Future directions for brand elimination research are discussed. © 2009 Society for Consumer Psychology. Published by Elsevier Inc. All rights reserved.

Brand portfolio management has been a long-standing area of scholarly inquiry (e.g., Aaker, 2004; Dacin & Smith, 1994), with extensive attention accorded to the practice of *expanding* portfolios (e.g., through new product development; Barone, 2005; Fedorikhin, Park, & Thomson, 2008; Hagtvedt & Patrick, 2008; Kim & John, 2008; Mahajan, Muller, & Bass, 1990; Mao & Krishnan, 2006). A well-documented finding of this research is that adding new brands/products to the portfolio affects consumers' evaluations of the company (e.g., Gurhan-Canli & Maheswaran, 1998; Swaminathan, Fox, & Reddy, 2001).

Another significant portfolio management issue—the practice of *pruning* brand portfolios—however, hasn't received adequate research attention (Varadarajan, DeFanti, & Busch, 2006). With more than 80% of profits achieved from fewer than 20% of brands, it is common for firms to eliminate brands from their portfolios (Kumar, 2003). For instance, Procter & Gamble has ostensibly spun off more than 1000 brands in the past decade alone (Carlotti, Coe, & Perry, 2004). The auto industry too has lately witnessed multiple incidences of brand elimina-

* Corresponding author. *E-mail address:* hmao@bus.ucf.edu (H. Mao). tion (e.g., the termination of Oldsmobile), a phenomenon covered extensively in the media.

Contrasting with its widespread prevalence, academic inquiry on brand elimination is extremely sparse (except for Varadarajan et al., 2006). Existing work suggests that brand elimination is an important tool in firms' portfolio management arsenal, with the potential to add economic value for a firm. The mechanism by which it is believed to increase firm value is as follows: a) discontinuing unwanted brands can free up resources, and b) these resources, if redeployed to support more promising brands, can strengthen the firm's core competency and enhance its growth potential (Varadarajan et al., 2006).

While brand elimination has the potential to enhance firm performance, the practice is feared to potentially cause consumer resistance and hurt the firm's image and reputation (Kumar, 2003; Varadarajan et al., 2006). On the other hand, a vast number of companies eliminate brands and continue to do well, both economically as well as perceptually. This paper investigates some demand side consequences of brand elimination, specifically, how brand elimination may influence consumer evaluations of the firm. Such investigation not only complements the current academic research on portfolio management, but also provides guidelines to aid managerial decision making related to brand elimination.

In the rest of the paper, we first introduce a consumer-side attribution-based theoretical framework. Drawing on attribution theory (Heider, 1958; Weiner, 1992) and the ease of explanation theory (Wanke, Bohner, & Jurkowitsch, 1997), the paper argues that consumers may sometimes see the economic value of brand elimination to the firm. In situations where consumers can successfully attribute brand elimination as an attempt to streamline portfolio and enhance performance, they are more likely to view such action favorably and accord more positive evaluations to the firm. On the other hand, when such attributions are less likely, firm evaluations may suffer. In the three studies that test this theory, we examine three factors that affect attributions and consequently consumer responses to brand eliminations-the characteristics of a) the eliminated brand (i.e., brand strength), b) the communication (i.e., the source of explanation for brand elimination), and c) the consumer segment (i.e., loyalty). The paper concludes with a discussion of its contributions and directions for future research.

Theoretical framework

Consumer attributions and the effect of brand elimination

Attribution, the process of assigning causes to an incident, is fundamental to human thought and is one of the most widely studied phenomena in social psychology (Heider, 1958; Lawrence & Nohria, 2001; Madrigal, 2008; Main, Dahl, & Darke, 2007; Weiner, 1992). This ever burgeoning literature has recently suggested that how individuals make attributions is guided by the naïve theory they hold (Cho & Schwarz, 2008; Hung & Wyer, 2008; Peng & Knowles, 2003; Malle, 1999), which in turn takes root and is enriched through direct life experiences and indirect learning through the experiences of others (Malle, 1999). Once established, this naïve theory is relied upon to interpret and understand new incoming information. Upon observing a behavior, individuals tend to search in their naïve theory for a plausible explanation. When a potential explanation is found based on the beliefs contained in the naïve theory, individuals may further examine how well the explanation fits with the behaviors in question (Malle, 1999). An explanation is likely to be adopted (discarded) if it is consistent (inconsistent) with the observed behavior.

In accord with this paradigm, when consumers learn that a brand is to be dropped, they are likely to search in their naïve theory for an explanation of the company's action. The marketing literature suggests that consumers may attribute corporate actions to a profit motive (DeCarlo, 2005; Friestad & Wright, 1994; Wright, 2002). For example, it is shown that consumers believe that companies engaging in cause-related marketing are driven in part by a profit-interest (Forehand & Grier, 2003; Luo & Bhattacharya, 2006). In addition, in the advertising domain, it is reported that consumers are able to attribute a profit motive to the advertiser for certain advertisements and adjust their attitudes accordingly (Campbell, 1995; Jain & Posavac, 2004). More generally, Friestad

and Wright (1994) conclude that lay people understand the motives underlying marketing persuasion, often as well as researchers do.

Once this profit motive is identified as a potential explanation for brand elimination, consumers will further evaluate whether the explanation fits well with the behavior, in other words, whether the specific brand elimination decision helps the company achieve greater performance and profitability. In situations where the fit is perceived as high, the 'eliminate-to-improve' explanation/attribution will appear adequate and be easily adopted by consumers. However, when the explanation does not fit the specific brand elimination decision, consumers will find it difficult to make the 'eliminate-toimprove' attribution.

According to the ease of explanation generation theory, the ease or difficulty experienced by individuals in generating reasons/explanations for an issue tends to influence their attitudes (e.g., Mandel, Petrova, & Cialdini, 2006; Wanke et al., 1997). If individuals experience relative ease in arriving at an explanation, they tend to be confident in the explanation (Tormala, Petty, & Brinol, 2002) and modify attitudes toward the issue in a way consistent with the explanation (Wanke et al., 1997). On the other hand, when individuals experience difficulty in generating the explanation, they are likely to judge the explanation as less reliable and consequently, form evaluations less consistent with it (Wanke et al., 1997).

Congenial with this perspective, the effect of brand elimination on consumer attitudes is likely to depend on how easily consumers can make the eliminate-to-improve attribution. When the circumstance is consistent with the consumers' naive theory that deleting the brand helps enhance the firm's performance, it should be relatively easy for consumers to make such an attribution. As a result, they should form more positive firm evaluations. Conversely, some circumstances may hinder them from perceiving the economic benefits of dropping the brand. In such situations, consumers may find it difficult to fit the eliminate-to-improve attribution to the brand elimination decision, and their evaluations should be less favorable. In the next section, we discuss how perceived strength of the eliminated brand may influence the ease of making the eliminate-to-improve attribution and thereby, consumer evaluations of the firm.

The strength of the eliminated brand

Compared to weaker brands, stronger brands are associated with more favorable image, larger market share, and greater sales volume (Kumar, 2003; Hill, Ettenson, & Tyson, 2005; Varadarajan et al., 2006). While many brands that have been eliminated in practice are weak (Carlotti et al., 2004), companies also drop strong successful brands for reasons such as lack of fit with the firm's long-term strategy or low market growth potential (Varadarajan et al., 2006). For example, IBM recently spun off its highly regarded PC segments to focus on the more promising server and consulting segments. Similarly, GE sold its profitable home appliance division because of a perceived low fit with its core competencies.

When the target brand being eliminated is weak, it's relatively easy for consumers to understand how/why dropping the brand may be beneficial. Deleting an underperforming brand while retaining superior ones is likely to strengthen the firm's portfolio quality and increase overall performance. That is, the eliminateto-improve attribution fits well with the company's action (i.e., spinning off a weak brand) and is thus likely to be adopted. When the eliminated brand is strong, however, it becomes more difficult to comprehend the benefits of such practice (Kumar, 2003). Dropping a strong brand that enjoys positive brand image and profitability appears inconsistent with consumers' naïve theory that firms' actions are profit driven (Malle, 1999). Consumers thus tend to experience greater difficulty in adopting a positive view of the brand elimination. Based on this reasoning, we expect that brand elimination will have a facilitative effect on firm evaluation when the target brand is weak and not when the target brand is strong.

 H_1 . When the eliminated brand is weak, brand elimination will lead to more favorable firm evaluations among consumers (as compared to the no-brand-elimination control condition). When the eliminated brand is strong, brand elimination will not lead to more favorable firm evaluations.

We anticipate that the effect hypothesized above is rooted in consumers' attributions. Specifically, the varying consumer responses to brand elimination targeting a strong vs. a weak brand are due to the difference in the likelihood that consumers make the eliminate-to-improve attribution. Hence, we predict that the effect of brand elimination on consumer response is mediated by their attributions.

 H_2 . When the eliminated brand is weak (vs. strong), consumers are likely to generate more (vs. less) favorable firm evaluations. Such effect will be mediated by the extent to which consumers attribute the brand elimination to a performance-enhancing effort.

Study 1

Procedure

The purpose of Study 1 is to test hypotheses 1 and 2, and demonstrate (1) the facilitative effect of brand elimination on consumers' firm evaluations, (2) the moderating role of brand strength, and (3) attribution as the mediating mechanism. A total of 85 undergraduate students from a large Midwestern university participated in a 2 (brand elimination: yes vs. no) \times 2 (brand strength: strong vs. weak) between-subjects, full-factorial study.

Respondents first read a report pertaining to a fictitious "ABC" Electronics Co. They were informed that "ABC" is a major company in the consumer electronic appliance industry and its products include MP3 players, hair dryers, and cameras, under four main brands—A, B, C, and D. Participants were further led to believe that the real name of the company was masked for confidentiality reasons and that the report was written by the American Electronic Consumer Goods Associa-

tion, an authoritative institute which evaluates the electronic appliance industry in the US.

Two objectives guided the creation of the above stimulus. First, by not revealing the real name of the company, we minimized potential contamination from participants' existing firm knowledge and attitudes, thereby enhancing internal validity. Second, we selected consumer electronic appliances as our stimulus because this is a category our participants are relatively familiar with and interested in. In addition, it was emphasized that ABC is a major company in the US market, and that the eliminated brand is one of the main brands of the company, so as to strengthen participants' identification with the target company as well as the eliminated brand and increase a sense of relevance in processing the brand elimination information. After reading the report, participants responded to the manipulation checks and the dependent variables.

Manipulations and checks

The report contained two parts. Whereas brand strength was manipulated in Part I, the brand elimination decision was manipulated in Part II.

In Part I of the report, a brief introduction of the company was given, along with a table listing two fabricated ratings for each brand—a brand image rating reported in *Consumer Reports* and the profitability rating based on a *Fortune* magazine report. In all conditions, brands A, B, and C were presented with high ratings (at least 4 stars on one rating and 5 stars on the other, with 5 stars being the highest rating). Brand strength was manipulated with brand D's ratings. Specifically, in the strong-brand condition, brand D was associated with high ratings (4 stars for brand image and 5 stars for profitability) while in the weak-brand condition, it received lower ratings (2 stars for brand image and 3 stars for profitability).

To assess the manipulation, participants rated the strength of the four brands on a 7-point scale with the probe "A/B/C/D is a strong brand" (1=strongly disagree/7=strongly agree). While the perception of the strength of brands A ($M_{\text{strong}}=6.51$ vs. $M_{\text{weak}}=6.26$; p>.10), B ($M_{\text{strong}}=5.62$ vs. $M_{\text{weak}}=5.59$; p>.10), and C ($M_{\text{strong}}=5.38$ vs. $M_{\text{weak}}=5.61$; p>.10) did not vary, brand D was evaluated as significantly stronger in the strong (vs. weak) brand condition ($M_{\text{strong}}=5.54$ vs. $M_{\text{weak}}=3.02$; F(1, 83)=91.95, p<.001), confirming the success of the manipulation.

Subjects continued to read Part II of the report regarding the changes that the company expected to make in the next year. The no-brand-elimination condition simply stated that "no foreseeable changes would be made for all brands in ABC Company." In the brand elimination condition, participants were informed that brand D would be withdrawn.

Dependent and process variables

The key dependent variable, participants' firm evaluation, was assessed by two 7-point scale items measuring their "liking toward ABC" and the extent to which they thought "ABC is well-managed." In addition, as a process probe, participants were asked to list all thoughts that they had pertaining to the report. These thoughts were coded by two judges unaware of





Fig. 1. The effect of brand strength on firm evaluations (Study 1).

the hypotheses, in terms of the extent to which the respondents made the performance-enhancement attributions in the brand elimination condition. Given that our goal was to examine the attributional nature of thinking rather than a more general probe on quality and quantity of cognitions, we adopted an approach similar to Moreau and Dahl (2005) in our thought analysis. The two judges were asked to assess each participant's thoughts on four 7-point scale items regarding the extent to which the judges felt the participant believes 1) that "the elimination of the brand is a rational decision for the company," 2) that "the company has a good reason to withdraw the brand," 3) that "the company will have a better performance in the future after withdrawing the brand," and 4) that "the company's management is making an effort to improve the company" (1=not at all/7=very much). With satisfactory inter-item correlations (all rs > .60; ps < .01), the ratings of the two judges were averaged across each item. The four items were further aggregated to create an overall attribution process measure (alpha=.98).

Results

A 2×2 ANOVA, with firm evaluations as the dependent variable and brand elimination and brand strength as independent variables, revealed a marginally significant effect of brand elimination: the decision to eliminate brand D (vs. no brand elimination) enhanced evaluations ($M_{\rm elimination}$ =5.30 vs. $M_{\rm no\ elimination}$ =4.86; F(1, 81)=3.23, p=.08). The main effect of brand strength was significant, with the weak (vs. strong) brand condition generating higher evaluations ($M_{\rm strong}$ =4.76 vs. $M_{\rm weak}$ =5.35; F(1, 81)=7.45, p<.01).

Importantly, as expected under H₁, the interaction between brand strength and brand elimination was significant (F(1, 81)= 4.88, p=.03). Contrast analysis further revealed that brand elimination increased consumers' company evaluations when the eliminated brand was perceived as weak ($M_{\text{elimination}}$ =5.78 vs. $M_{\text{no elimination}} = 4.91$; F(1, 81) = 8.75; p < .01) but not when the brand was perceived as strong ($M_{\text{elimination}} = 4.71$ vs. $M_{\text{no elimination}} = 4.80$; p > .10; see Fig. 1).

The mediating role of attribution

We hypothesized that the effect of brand strength on consumer response to brand elimination operates through an attributional mechanism. To test this prediction, we conducted two separate mediation analyses—one based on Baron and Kenny (1986) and the other using Structural Equation Modeling (SEM). Findings for both converged, supported H_2 , and are reported below.

First, based on Baron and Kenny (1986), we conducted a series of regressions. A first regression showed that the strength of the eliminated brand was a significant predictor of firm evaluations ($M_{\text{weak}}=5.78$ vs. $M_{\text{strong}}=4.71$; F(1, 40)=16.46, p<.001). A second regression confirmed that the effect of brand strength on the eliminate-to-improve attribution was significant ($M_{\text{weak}}=5.09$ vs. $M_{\text{strong}}=4.41$; F(1, 40)=5.60, p=.02). A third regression revealed that this attribution had a significant effect on firm evaluations (F(1, 40)=17.47, p<.001). Finally, when both attribution and brand strength were included as predictors, attribution had a significant impact on firm evaluations (F(1, 39)=10.43; p=.003) as did brand strength (F(1, 39)=9.56; p=.004). A Sobel test further confirmed that the effect of brand strength on firm evaluations was partially mediated by attribution (z=2.06; p=.04).

The Structural Equation Model (see Iacobucci, Saldanha, & Deng, 2007) for our purpose relied on three latent variables: the manipulated independent variable (brand strength) with one indicator (i.e., the manipulation), the mediator (attribution) with four indicators, and the dependent variable firm (firm evaluations) with two indicators. The Chi-square of the model was 39.7 (df=12; p<.001), the goodness-of-fit index .80, and the comparative fit index .92. As shown in Fig. 2, brand strength exerted a significant direct effect on firm evaluation as well as a significant indirect effect through attribution.

Discussion

Study 1 shows that brand elimination may enhance rather than jeopardize company evaluations. However, this facilitative effect is bounded by certain circumstances. Specifically, this



Fig. 2. Structural equation model for the mediation analysis (Study 1). Note: The first number on each path is an unstandardized coefficient. The second number in the parenthesis is standard error. The third number is a standardized coefficient. All paths are significant. * p < .05, ** p < .01.

study finds that when the brand to be eliminated is weak (vs. when it is strong), consumers are more likely to form positive firm evaluations. Furthermore, the mediation analysis shows that underlying this facilitative effect is consumers' attributions. Brand elimination targeting a weak (vs. strong) brand better enables consumers to attribute the action to a performance-enhancing effort, and hence receives more favorable judgments.

If, as indicated by our theory, consumers fail to generate positive evaluations for an elimination targeting a strong brand because making the eliminate-to-improve attribution in such scenario is difficult, then an explanation of this action provided externally should help consumers better understand the benefits of the elimination and make a positive attribution. Consequently firm evaluation may be enhanced even when the eliminated brand is perceived as strong. Study 2 was designed to test this proposition by investigating the interaction between brand strength and the availability of an external explanation on consumer response.

Study 2

Based on our theory that the level of ease associated with the eliminate-to-improve attribution underlies consumer response to brand elimination, we expect that the availability of an external explanation of the action will influence consumer evaluations. In situations where consumers tend to experience difficulty in generating this attribution internally (i.e., by themselves), an external prompt may help consumers realize the benefits of brand elimination and enhance their firm evaluations.

When communicating the brand elimination decision to consumers, companies may choose to explain or not to explain why the decision is made. In situations where companies refrain from providing an explanation, consumers are left to speculate on the reasons themselves. We expect that whether consumers can rely on an externally (company) provided explanation or have to reach a justification internally (self-generated) will moderate their judgments of brand elimination, through influencing the likelihood that they will adopt the eliminateto-improve attribution. That is, we propose that justification source would interact with brand strength in determining consumer responses.

As Study 1 shows, when a strong brand is eliminated, consumers tend to experience difficulty in generating a positive justification for such action. If the company offers no explanation and leaves consumers to speculate on the decision themselves, consumers tend to conclude that the decision is questionable, not well-thought out, and/or unreasonable (Wanke et al., 1997). Consumers' inability to reach justifications internally, however, may be compensated when an explanation is provided from an external source, e.g., the company. The availability of an external explanation enables consumers to understand the benefits of the elimination and reconcile the discrepancy between the profit motive belief in their naïve theory and the observed company action of eliminating a strong brand, making it easier for them to make the eliminate-to-improve attribution. Hence, in situations where a relatively strong brand is eliminated, we expect that an explanation provided by the company will increase favorable

evaluations (compared to where consumers have to make justifications themselves).

Under circumstances where a weak brand is eliminated. consumers can relatively easily and spontaneously generate favorable arguments and make the eliminate-to-improve attribution, without an external explanation, as demonstrated in Study 1. In such a case (where a weak brand is eliminated), a mere announcement of the decision from the company may be sufficient and an official explanation to justify the decision may be unnecessary. Indeed, companies may be better off leaving consumers to generate their own justifications, for the literature suggests that self-generated opinions are usually more effective than externally provided ones. For example, Wu and Shaffer (1987), in their first experiment, asked half the participants to taste two new brands of peanut butter before forming their preferences. The other half was given consensus data describing the preference of others. The authors found that the internally formed preference, compared to the externally provided preference, was not only stronger but also had greater influence in guiding purchase intentions. These findings indicate that relative to information given by an external source, selfgenerated viewpoints tend to be more diagnostic and persuasive.

Hence, though consumers are able to see the benefits of elimination targeting a weak brand, through either companyprovided explanation or self-generated justification, those who voluntarily search their naive theories and generate positive attributions should be better able to register such attributions and more likely to be influenced by them in their evaluations. Therefore, we expect more positive evaluations associated with weak brand eliminations when consumers generate their own explanations than when companies provide them.

 H_3 . Brand strength will interact with justification source to affect consumer responses to brand elimination: when a strong brand is eliminated, company explanation (vs. consumer speculation) is likely to generate more favorable company evaluations. However, when a weak brand is being eliminated, consumer speculation (vs. company explanation) is likely to generate more favorable evaluations.

Procedure

 H_3 was tested in a 2 (brand strength: strong vs. weak)×2 (justification source: company explanation vs. consumer speculation) between-subjects, full-factorial experiment. A total of 101 students from the same university read a report regarding "ABC" Electronics Company, with the same cover story as in Study 1. Then they responded to the manipulation checks, dependent variable, and other probes.

Manipulations, checks, and dependent measure

Part I of the report contained the same manipulation and the manipulation check of the strength of the eliminated brand (i.e., brand D) as in Study 1. Data revealed that participants in the strong (vs. weak) brand condition evaluated brand D as significantly stronger ($M_{\text{strong}}=5.33$ vs. $M_{\text{weak}}=2.80$; F(1, 99)=91.49, p<.001). On the other

hand, participants in the two conditions perceived brands A $(M_{\text{strong}}=6.08 \text{ vs. } M_{\text{weak}}=6.16; p>.10)$, B $(M_{\text{strong}}=5.20 \text{ vs.} M_{\text{weak}}=5.38; p>.10)$, and C $(M_{\text{strong}}=5.53 \text{ vs. } M_{\text{weak}}=5.54; p>.10)$ to be equally strong, confirming success of the manipulation.

In the Part II of the report, participants were informed that brand D would be withdrawn. In the company-explanation condition, participants further read the CEO's explanation of the elimination decision as one made on the basis of extensive research, which revealed that brand D was incongruent with the strategic positioning of the company. In the consumerspeculation condition, no explanation was offered. Instead, participants were instructed to generate three possible reasons to explain the decision themselves. This instruction was based on research which shows that generating three reasons to support an issue is considered a relatively easy task (Wanke, Bless, & Biller, 1996). Thus, any difficulty experienced by participants has to be the result of task content (i.e., generating reasons for deleting a strong brand).

Further, our hypothesis suggests that in evaluating weak brand elimination, internally generated justifications are more persuasive than company-provided explanations. To ensure that explanations across the two sources are of equivalent quality (so that the comparison of the two is meaningful), we measured perceived explanation quality/reasonableness. Immediately after participants read the provided explanation or generated their own explanation, they rated how reasonable they believed the brand elimination decision was (1=absolutely not reasonable/7=absolutely reasonable).

Finally, the dependent variable was the same as in Study 1.

Results

A 2×2 ANOVA model was employed, with consumer evaluations as the dependent variable and brand strength and justification source as independent variables. Consistent with H₁, the main effect of brand strength was significant, with weak (vs. strong) brand elimination leading to higher evaluations (M_{weak} =5.29 vs. M_{strong} =4.71; F(1, 97)=12.68, p=.001). The effect of justification source was non-significant (M_{company} =4.99 vs. M_{consumer} =5.00; p>.10).

Supporting H₃, the brand strength×justification source interaction was significant (F(1, 97)=13.55, p<.001). Contrast analysis further revealed that when a strong brand was eliminated, explanations provided by the company generated higher evaluations ($M_{company}=5.00$ vs. $M_{consumer}=4.40$; F(1, 97)=6.62; p=.01). However, when a weak brand was eliminated, consumers' internally generated explanations led to superior evaluations ($M_{consumer}=5.60$ vs. $M_{company}=4.98$; F(1, 97)=6.93; p<.01; see Fig. 3).

Perceived explanation quality

An ANOVA on perceived explanation quality showed a significant interaction between brand strength and justification source (F(1, 97)=4.87; p=.03). Two planned contrast analyses were conducted. First, when the eliminated brand is weak, we expect that consumers are able to reach their own justifications.

Therefore, internal explanations are available in the consumer justification condition whereas external explanation is also available in the company-explanation condition. It is important to ensure that the perceived explanation quality across internal and external sources is equivalent. Analysis confirmed the equivalence of explanation quality ($M_{consumer}$ =5.92 vs. $M_{company}$ =5.48; F(1,97)=1.54; p>.10), and thus ruled out the potential alternative explanation that the varying firm evaluations we observed in the weak-brand condition may be attributable to the different explanation quality associated with the two sources.

Second, in the strong-brand condition, it is expected that consumers are unable to reach satisfactory justifications by themselves. Thus, the perceived explanation quality should be lower in the consumer-justification condition than in the company-explanation condition. Contrast analysis supported this expectation $(M_{\text{consumer}}=3.80 \text{ vs. } M_{\text{company}}=4.46; F(1, 97)=3.53; p=.06).$

The above analyses illustrate that different causes underlie the effect of justification source on firm evaluations in strongvs. weak-brand conditions. When a strong brand is eliminated, the availability of a reasonable explanation in the companyexplanation condition and the unavailability of such explanation in the consumer justification condition result in higher evaluations in the former condition. When the eliminated brand is weak, both conditions provide equally reasonable explanations, but consumers are more likely to be influenced and thus form more positive evaluations when explanations are internal (i.e., generated by consumers themselves) rather than external (i.e., provided by the company).

Discussion

The findings of Study 2 are convergent with those of Study 1: eliminating a weak brand generated more favorable consumer responses as compared to deleting a relatively strong brand.



Fig. 3. The impact of brand strength and justification source on firm evaluations (Study 2).

Second, the results provide further support for an attributional mechanism underlying the effects observed. Specifically, Study 2 demonstrates that when consumers failed to generate a reasonable positive explanation internally (i.e., when the eliminated brand is strong), providing justifications from an external source made it easier for consumers to make a positive attribution and hence increased favorability of responses. On the other hand, when a weak brand was eliminated, consumers were able to make a positive attribution by themselves. Further, because internally generated explanations tend to be more compelling, evaluations were higher as compared to the case when the firm provided the explanation underlying its decision to eliminate the (weak) brand.

While Studies 1 and 2 obtained findings supportive of our theoretical framework, they suffer from the same limitation. Both studies, in attempting to control for potential confounds and achieve high internal validity, tested a fictitious company. Effort was made to increase the relevance of the brand elimination to participants, with instructions informing participants that ABC is a major consumer electronic appliance company and that brand D is one of its main brands. Considering that most of our participants are likely to be interested in products such as MP3 players and cameras, and are likely to own and/or make future purchase in these categories, we expect that participants will relate the eliminated brand D to a brand that they like and/or use, and will view the brand elimination as relevant to them. Therefore, the results observed in Studies 1 and 2 may be more representative of consumers who share a deeper connection with the eliminated brand, including loval consumers.

As a more direct test, in Study 3, we used a real company and a real brand as stimuli, and measured consumer loyalty. The main purpose of Study 3 was to explore the difference between loyal and non-loyal consumers in their responses to brand elimination. Based on the above discussion, we expect that findings for loyal consumers, who relate more strongly to the eliminated brand, will mirror those obtained under Studies 1 and 2. That is, loyal consumers will generate positive evaluations as long as they perceive that the elimination is beneficial to the company (e.g., when the eliminated brand is weak vs. strong). Non-loyal consumers are expected to respond in a different fashion, as explained below.

Study 3

Study 3 explores the effect of loyalty on consumer response to brand eliminations. Compared to non-loyal consumers, loyal consumers are more likely to have incorporated the brand into their self-concepts, having established stronger brand attachment (Belk, 1988). Consequently, they are likely to be more involved in evaluating the brand elimination decision than their non-loyal counterparts. Specifically, after identifying eliminateto-improve as a possible explanation, loyal consumers will further carefully assess the applicability of such an attribution to explain the brand elimination. When a strong brand is eliminated, loyal consumers will tend to find a discrepancy between the profit motive and the action. Hence, they will likely reject a positive attribution and evaluate the firm lower. Only when the eliminated brand is weak will they attribute brand elimination to a performance-enhancing effort and form more favorable firm evaluations.

In contrast, non-loyal consumers have weaker attachment with the brand and eliminating the brand is therefore of lower relevance to them. They are thus likely to be less involved in forming opinions regarding brand elimination. When involvement is low, consumers tend to be persuaded even by low quality arguments (Petty, Cacioppo, & Schumann, 1983). We therefore expect that non-loyal consumers, being less deliberate in evaluating the brand elimination, are less motivated to assess whether the eliminate-to-improve attribution is applicable. Consequently, they tend to attribute brand elimination to a profit motive even when the brand eliminated is strong and thus make favorable evaluations regardless of brand strength. Hence,

H₄. Brand strength will interact with consumers' loyalty to affect consumer responses to brand elimination: for loyal consumers, eliminating a weak (vs. strong) brand is likely to generate more favorable company evaluations. However, non-loyal consumers' company evaluations will not vary by brand strength.

Procedure

A total of 186 students from the same university participated in this study. In Part I of the two-part report, participants read information about four well-known brands of the Procter and Gamble Co (Dawn dish washing products, Tide laundry care products, Mr. Clean household cleaning products, and Charmin paper products). In Part II, they were informed that the Charmin brand would be discontinued.

Manipulation and manipulation checks

The strength of the Charmin brand was manipulated in Part I of the report. All of the four brands were given two fabricated ratings (out of five stars) that indicated their strength—revenues and profits generated by the brand in the past three years. Dawn, Tide, and Mr. Clean were portrayed as strong brands in both conditions with at least four stars on one rating and five stars on the other. In the strong-brand condition, Charmin also received high ratings—five stars on the revenue rating and four stars on the profit rating. In the weak-brand condition, Charmin received only three stars on the revenue rating and two stars on the profit rating.

To minimize participant fatigue, a separate pretest was conducted to check the brand strength manipulation, using participants from the same subject pool. Thirty-two participants read part I of the report and rated the strength of the four brands, using the same measures as those used in Studies 1 and 2. One-way ANOVA confirmed that participants in the strong (vs. weak) brand conditions perceived the Charmin brand as stronger $(M_{\text{strong}}=5.63 \text{ vs. } M_{\text{weak}}=3.13; F(1, 30)=27.03; p<.001)$. Meanwhile, participants in the two conditions evaluated the other three brands—Dawn $(M_{\text{strong}}=6.19 \text{ vs. } M_{\text{weak}}=6.56; p>.10)$, Tide $(M_{\text{strong}}=5.88 \text{ vs. } M_{\text{weak}}=6.31; p>.10)$, and Mr.

Clean (M_{strong} =5.56 vs. M_{weak} =5.94; p>.10)—to be equally strong.

Dependent variable and measured independent variables

The dependent variable, consumer evaluations toward the company, was measured with the same scale used in Studies 1 and 2. Participants' loyalty to the eliminated brand was gauged by a four-item scale ("I often buy this brand when I buy paper products," "I intend to keep purchasing this brand as long as it is available," "I feel committed to this brand," "I would be willing to pay a higher price for this brand over other brands," 1=not at all/7=very often, Chaudhuri & Holbrook, 2001; alpha=.95). The four items were averaged and a median split divided participants into loyal and non-loyal consumers.

Furthermore, to investigate whether involvement in the evaluation task differed between the two consumer groups as theorized, participants were asked to report their level of involvement on a three-item scale ("I found the task interesting," "I felt involved in the task," and "I was motivated to do the task", 1 = strongly disagree to 7 = strongly agree; *alpha*=.91). The three items were averaged.

Results

A 2 (brand strength)×2 (loyalty) ANOVA was conducted. Brand strength's effect on firm evaluations was again significant as before (M_{weak} =5.02 vs. M_{strong} =4.72, F(1, 182)=5.18; p=.02). Loyalty was also a significant predictor, and non-loyal consumers generated more positive evaluations compared to loyal consumers ($M_{\text{non-loyal}}$ =5.10 vs. M_{loyal} =4.64, F(1, 182)=10.55, p=.001).

Supporting H₄, the interaction between brand strength and loyalty was significant (F(1, 182)=5.30; p=.02; see Fig. 4). Planned contrast analyses showed that loyal consumers formed more positive firm evaluations when a weak brand was eliminated, compared to the conditions where a strong brand



Fig. 4. The impact of brand strength and consumer loyalty on firm evaluations (Study 3).

was dropped (M_{weak} =4.95 vs. M_{strong} =4.24, F(1, 182)=10.09, p=.002). The response of loyal consumers was thus consistent with those of subjects in Studies 1 and 2. In contrast, firm evaluations of non-loyal consumers did not differ with the strength of the eliminated brand (M_{weak} =5.10 vs. M_{strong} =5.10, p>.10). Furthermore, evaluations of non-loyal consumers (in either brand strength condition) were comparable to those of loyal consumers in the weak-brand condition (both ps>.10) but more positive than those of loyal consumers in the strong-brand condition (both ps<.001). Altogether, the results show that while loyal consumers formed positive firm evaluations only when the eliminated brand was weak, non-loyal consumers generated more favorable responses, regardless of the brand strength.

Involvement

We theorized that the difference in evaluations between loyal and non-loyal consumers is due to their varying level of involvement. Whereas loyal consumers are highly involved and generate positive evaluations only when the eliminated brand is weak, non-loyal consumers, with relatively low involvement, are unlikely to discern the differential applicability of the eliminate-to-improve attribution and will show favorable responses for eliminations targeting either a weak or a strong brand. A 2 (brand strength)×2 (loyalty) ANOVA on involvement revealed supporting results. The model showed only a main effect of loyalty (M_{loyal} =4.68 vs. $M_{non-loyal}$ =4.07; F(1,182)=8.06; p=.005), suggesting that loyal (vs. non-loyal) consumers were more involved in evaluating brand elimination, lending support to our theorization.

Discussion

Study 3 shows that the brand strength effect obtained in Studies 1 and 2 is generalizable to a real brand and a different product domain (i.e., consumer goods vs. electronic appliance), demonstrating ecological validity. Further, differences in consumer responses to elimination targeting a strong vs. a weak brand are found to exist only among loyal consumers who relate to the brand and are involved in the evaluation. Non-loyal consumers are less motivated to assess the applicability of the eliminate-to-improve attribution and tend to form uniformly positive firm evaluations, regardless of the strength of the eliminated brand.

Discussion and implications

This article makes several contributions to the literature. First, to our knowledge, ours is the first examination of consumer-side consequences of brand elimination, a topic of significant theoretical and managerial importance. Theoretically, understanding the effect of pruning brand portfolios adds to our current knowledge of portfolio management which is focused almost exclusively on portfolio expansion. In doing so, we make a contribution towards developing a more complete and integrative brand portfolio management model. Practically, identifying factors that affect consumer responses to brand elimination provides guidelines that can assist managers to better manage their brand portfolios in general and brand elimination in specific.

Second, we put to test the belief that brand elimination results in negative attitudinal consequences for firms. We found that brand elimination may indeed enhance rather than jeopardize firm image under certain circumstances. This finding suggests that the potential damage of an elimination program may be bounded.

Further, by building a contingency model, we identified the contexts when brand elimination is more likely to enhance firm evaluations. Study 1 finds that it is easier for consumers to judge brand elimination targeting a weak (vs. strong) brand as beneficial, and as a result, eliminating a weak (vs. strong) brand leads to more favorable responses. Study 2 shows that explanations provided by companies would help consumers to make positive attributions for elimination targeting a strong brand, and impact consumer responses accordingly. Specifically, evaluations are enhanced when companies (i) offer explanations for dropping a relatively strong brand but (ii) permit consumers to self-justify weak brand elimination. Study 3 establishes that loyal (vs. non-loyal) consumers are more likely to scrutinize whether an eliminate-to-improve attribution is applicable and accord more favorable evaluations when the eliminated brand is weak, whereas non-loyal consumers respond favorably regardless of the brand strength. All the three studies point to an attributional mechanism underlying consumer responses to brand eliminations. Specifically, in situations where consumers are able to attribute brand elimination to a performance-enhancing effort, they are likely to form more positive evaluations toward the firm.

Limitations and future research

As the first empirical examination of the consumer-side effects of brand elimination, the findings in this research should not be over-generalized and greater understanding is needed of the role of other moderators and consequences of brand elimination. First, our theoretical framework is based on the premise that consumers' naïve theory about companies' profitseeking motive would allow them to make the eliminate-toimprove attribution. Thus, our findings are limited to consumers who a priori possess such a naïve theory. Consumers with a different naïve theory may draw different attributions and form brand elimination related judgments accordingly. For instance, it has been found that individualistic and collectivistic consumers differ in the level of abstraction of category representations (Jain, Desai, & Mao, 2007) as well as in their response to negative publicity (Monga & John, 2007). These differences could be related to how consumers with different mindsets and naïve theories make judgments based on firm portfolio reductions.

Second, besides consumer characteristics, characteristics of the brand elimination program deserve exploration. The scant work in this area has suggested that brand elimination may take various forms. For instance, Kumar (2003) delineates three possible ways by which brands can be eliminated—brands can be simply withdrawn from the market (the form featured in our paper), they could be sold to another company, or they could be merged with other brands. These three forms of brand elimination may impact firm performance and consumer choice differently. As a result, they may induce different consumer responses. While our paper focuses on the first type (market withdrawal), future research is needed to understand the other two types of brand elimination as well as the differences between the three approaches of brand elimination.

Varadarajan et al. (2006) suggest that brand elimination programs vary in the level of intensity. The greater the number of brands that are eliminated, the stronger the intensity. Our research focuses on low-intensity brand elimination, specifically, the scenario in which only one brand is eliminated. It is likely that a more intensive brand elimination program may raise consumers' concern of the company's management capability, lower consumer trust, and decrease their favorable evaluation of the firm.

Third, corresponding to our effort in exploring portfolio management practices of dropping brands, the recent consumer lifetime value (CLV) literature has addressed customer divestment, a customer management practice of dropping low-value customers (Mittal & Sarkees, 2006). Together, these two streams are able to provide guidelines for companies that seek to enhance profitability through concentrating on core competencies.

Last, the attributional mechanism revealed in this paper may be applied to understand consumer reactions of many other company actions. Future research may explore how attributional thinking may influence consumer judgments of other company actions such as socially responsible behaviors (Luo & Bhattacharya, 2006; Yoon, Gurhan-Canli, & Schwarz, 2006).

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