FEEDBACK EFFECTS IN INGREDIENT BRANDED OFFERINGS

By

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ABSTRACT

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Ingredient branding is a marketing strategy that is on the rise in the marketplace. This strategy, a special case of a brand alliance, is used to help firms gain a foothold in a new market or strengthen their position in current markets through the development of ingredient branded offerings (henceforth called IBOs). An IBO involves a branded ingredient residing within another branded product (e.g. Betty Crocker cake mix with Hershey’s chocolate). Through the use of a brand partner, brands are able to increase their visibility and credibility in markets. However, in spite of the benefits provided by ingredient branding, there are many unanswered questions regarding the use of this strategy. Of utmost importance is the impact of this strategy on the involved brands. The impact of an IBO on the parent brands occurs through a mechanism called feedback effects, which involves information about the IBO impacting the individual brands. Ingredient branding is touted as a strategy to help firms build their brands, yet this advantage has not been clearly documented.

Because of this key gap in the literature, in this dissertation I investigate factors related to this strategy that can impact a firm’s ability to engage in brand building. Specifically, I focus on
three major issues that can impact the involved brands. The first is parent brand equity asymmetry, which is the gap in equity levels between the two brands involved in the IBO. The second issue, product outcome, involves the performance of IBO in the marketplace. The third issue, partnership initiation, is concerned with who created the alliance. The results of this dissertation indicate that each of these unique issues have differing effects on the brands involved in the IBO. To further examine feedback effects, I also empirically show that an IBO is a superior strategy to a brand extension under certain conditions.
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DEDICATION

This dissertation is dedicated to Louise W. Hagood for her love, support, and encouragement. Without her, this work would never have occurred. I am grateful for her for many things, but especially for instilling in me the value of education at an early age.
CHAPTER 1
INTRODUCTION

Marketers have numerous tactics at their disposal to help their firm contend in the marketplace. As industries become increasingly fragmented and competitive, the success of the firm is becoming progressively more dependent on the success of these tools. One approach that is an integral part of many marketing plans is ingredient branding.

Ingredient branding is a broad term that involves firms combining products into a new product to take advantage of each others’ equity positions, reputations, and access to channels. An ingredient branded offering (herein referred to as an IBO) is a form of brand alliance and is simply a product that consists of a core brand and at least one branded component. Toll House cookie dough with Reese’s Peanut Butter Cups is an example of an IBO. The brands that comprise an IBO are called parent brands. Both Toll House and Reese’s are considered parent brands. A parent brand can be classified as either a host or ingredient. The host is the core brand that houses the component or ingredient brand; the ingredient is a component brand that resides within the host. In the previous example, Toll House is the host and Reese’s is the ingredient.

An IBO requires brand cooperation, established brand equity, and the presence of at least one branded ingredient residing within a new product. This strategy allows firms to share development costs, create associations with other brands, improve quality perceptions, and enhance brand value (Blackett and Boad 1999). Ostensibly, an IBO allows firms to become more competitive in their respective product categories. This improvement in competitiveness stems from differentiation (e.g. Desai and Keller 2002), as the presence of the additional brand attracts attention. For example, Dell computers contain Intel microchips as an ingredient. For a
consumer, seeing both brand logos on the packaging is unique and thus gets noticed more than if only one brand is presented. Further, linkages between the two high equity brands have a significant impact, as it creates transfer effects between the involved brands. In this work, a transfer effect is defined as information about one product or brand transferring to another related product or brand. This information can be in the form of equity, attributes, affect, and many other types. Transfer effects can move from parent brand to the IBO (forward transfer), from the IBO to parent brand (feedback), and from parent brand to parent brand (lateral transfer) in an IBO.

The concept of ingredient branding is an interesting topic of study due to its unique configuration. Having multiple brands creates complexities that are not present in a similar yet distinct strategy, the brand extension. These complications stem from (1) requiring firms who might normally be competitors to work together, and (2) forcing consumers to attempt to make sense of the brand combination. Despite these complexities, an IBO is a great tool to allow firms to enter into and expand their presence in product categories.

Through an IBO, parent brands can take advantage of the existing equity of each other to speed entry into a new category. Diet Coke with Splenda illustrates this point. By partnering with Coke, Splenda is able to gain access into the cola market. Attempting to enter into the cola category alone would prove much more difficult. However, associating with an established cola category member such as Diet Coke makes entry much easier.

In addition to its ability to enter a brand into a new category, an IBO can also be utilized to expand within a category. A branded ingredient can serve as a new attribute within the category. Using the previous example, Coca-Cola expanded its reach in the cola market by
adding Splenda to its Diet Coke brand. The existence of this well known ingredient allowed Coca-Cola to expand their sales to consumers who prefer Splenda as an artificial sweetener.

As illustrated above, an IBO is similar to yet different from line and brand extensions. A line extension is using an existing brand name to enter a new product into the same product class and a brand extension involves using an existing brand name to enter a new product class (Aaker and Keller 1990). An IBO could be considered a line extension for one parent and a brand extension for another. For example, again consider Diet Coke with Splenda. The IBO is a line extension for Coca-Cola because they already offer other versions of cola. Splenda is a new attribute that allows them to expand their line. However, for Splenda, the IBO is a brand extension because it is a new category for them. Pairing with Coca-Cola allows Splenda entry into the cola market, a category in which they were previously absent.

Despite some initial work on IBOs in the literature, there are many key related issues that have been unexplored or underexplored. These issues are crucial because they are factors that can affect a firm’s chances for success in the marketplace. In the next section I introduce a number of these key issues that form the foundation of this dissertation.

**KEY CONCEPTS AND THEORY**

While many key concepts differ between extensions and IBOs, extension notions are very important to IBOs. Thus, I use these concepts to understand IBO dynamics. Refer to Table 1.1 for a summary of all the key IBO related concepts and terms.
**TABLE 1.1**

**RELEVANT TERMS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example</th>
</tr>
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<tbody>
<tr>
<td>Ingredient Branded Offering (IBO)</td>
<td>A form of brand alliance and is simply a product that is a combination of the multiple brands</td>
<td>Toll House cookie dough with Reese's peanut butter</td>
</tr>
<tr>
<td>IBO outcome</td>
<td>The performance of the IBO</td>
<td>Toll House cookie dough with Reese's peanut butter performs well in the marketplace</td>
</tr>
<tr>
<td>Parent brand</td>
<td>A brand involved in the IBO</td>
<td>Toll House and Reese's</td>
</tr>
<tr>
<td>Host</td>
<td>The core brand that contains ingredients</td>
<td>Toll House</td>
</tr>
<tr>
<td>Ingredient</td>
<td>A component brand that resides within a host</td>
<td>Reese's</td>
</tr>
<tr>
<td>Feedback</td>
<td>Information about one product or brand transferring to another related product or brand</td>
<td>A failed IBO has a negative impact on the host and ingredient brands</td>
</tr>
<tr>
<td>Parent brand equity asymmetry</td>
<td>A condition in which one of the parent brands has significantly higher equity than the other</td>
<td>Toll House cookie dough with a generic branded peanut butter</td>
</tr>
<tr>
<td>Initial parent brand equity</td>
<td>The measured equity of a parent brand pre-IBO</td>
<td>Toll House equity before entering into the IBO with Reese's</td>
</tr>
<tr>
<td>Subsequent parent brand equity</td>
<td>The measured equity of a parent brand after an IBO outcome</td>
<td>Toll House equity after its IBO with Reese's became successful</td>
</tr>
<tr>
<td>Initiator</td>
<td>The parent brand that initiated the IBO</td>
<td>Toll House approached Reese's about creating the IBO</td>
</tr>
</tbody>
</table>

**Transfer Effects**

As was noted earlier, transfer effects involve linking a brand to a person, place, thing, or another brand (Keller 2003). These transfer effects create associations between the parent brands and their products (Aaker 1991). Transfer effects are the mechanism by which firms can capitalize on brand equity. A firm can increase revenues by leveraging established brand equity through a transfer effect called *forward transfer*. By prominently displaying an established brand name, a firm can enhance its performance in the marketplace, because consumers are
comfortable buying products with the name of a well established brand. However, a firm can also build its brand through another transfer effect, termed feedback. By lending a brand name to successful products, perceptions of the brand could increase. The use of forward transfer and feedback allows the brand to subsequently extend their brand into new products, which starts the revenue increase → brand building cycle over again. Figure 1.1 shows this relationship.

*Forward transfer.* Forward transfer effects are directionally specific and move from the parent brand to the brand extension (see Figure 1.2). For instance, quality perceptions of the Polo brand generated by its reputation create a forward transfer effect to their line of home furnishings, which utilize the same brand name. This allows Polo to extend into a new category and increase revenues. If Polo attempted to enter this category with a new brand name, they would not be afforded the advantages of leveraging their brand name, and thus revenues and sales growth would likely be much lower.
Prior research has shown that a parent brand name impacts evaluations of brand extensions via forward transfer effects (Aaker 1996; Aaker and Keller 1990; Park, Milberg, and Lawson 1991). Simply, the more favorable the evaluation of the parent brand, the more favorable the evaluation of the brand extension. This link between the parent brand and extension occurs through forward transfer.

**FIGURE 1.2**

**BRAND EXTENSION TRANSFER EFFECTS**

![Diagram showing forward transfer effect](image)

This dynamic also exists for IBOs (see Figure 1.3). Specifically, the addition of a branded component enhances evaluations of the new product (e.g. McCarthy and Norris 1999; Park, Jun, and Shocker 1996; Rodrigue and Biswas 2004; Simonin and Ruth 1998; Vaidyanathan and Aggarwal 2000; Washburn, Till, and Priluck 2000). This implies that associations of the ingredient transfer to the new product, resulting in increased evaluations and ultimately brand equity.

*Feedback effects.* The second type of transfer, the feedback effect, is also direction specific but moves in the opposite path: from the extension back to the parent brand (see Figure 1.2). The quality of Polo’s home furnishings can create a feedback effect back to Polo, thus strengthening the core brand.
Research indicates that evaluations of a brand extension can impact evaluations of the parent brand via feedback effects in both a positive (e.g. Balachander and Ghose 2003; Swaminathan, Fox, and Reddy 2001) and negative (e.g. Lane and Jacobson 1997; Loken and John 1993; Park, Milberg, and Lawson 1991) manner under certain conditions. This relationship between parent brands and brand extensions serves as a foundation for research on feedback effects in IBOs.

As with forward transfer, feedback also exists with IBOs (see Figure 1.3). The literature on feedback in IBOs indicates that attitudes toward the IBO impact attitudes toward the parent brands (Simonin and Ruth 1998). More favorable attitudes toward the IBO lead to more favorable attitudes toward the involved parent brands. This is consistent with the notion that the
IBO is an effective brand building strategy. Additional research finds that brand order matters, such that feedback effects are different based on which brand name is listed first in an IBO (Park, Jun, and Shocker 1996). Other work finds that an ingredient brand is enhanced when involved in an IBO (Van Osselaer et al. 2001), and an IBO provides parent brands protection from dilution under certain conditions (Janiszewski and Van Osselaer 2000).

_Lateral transfer._ Despite the parallels between IBOs and brand extensions in forward transfer and feedback effects, IBOs are more complicated than extensions because they involve a second parent brand. The presence of multiple parents creates a third type of transfer: _lateral transfer effects._ Shown in Figure 1.3, this final type of transfer effect moves between the parent brands. This type is not directionally specific: they move in both directions: from the host parent brand to the ingredient parent brand, and from the ingredient parent brand to the host parent brand. Since parent brands are linked due to their presence in an IBO, they become associated with one another through these lateral transfer effects. For instance, Dell and Intel have become connected due to lateral transfer effects between the two brands. Attributes of Dell are transferred to Intel, thus conceptually linking them. Concurrently, attributes of Intel are transferred to Dell, further strengthening the linkage.

Research on lateral transfer in an IBO indicates that negative information about one parent brand can harm the evaluations of the other parent (Votolato and Unnava 2006). Because the two parent brands are indelibly linked via the IBO, associations between the two exist, therefore causing negative information about one to negatively impact the other. Additional work on lateral transfer indicates that the influence of one brand can be suppressed based on the influence of its partner brand (Venkatesh and Mahajan 1997).
All three types of transfer effects can seemingly have profound impacts on the brands present in an IBO. Despite the significance of all three types, this dissertation focuses on feedback effects. Feedback effects are important because they impact brand building, which is crucial for creating long term successful firm performance. Yet, research on IBO feedback effects is still in its early stages. This is surprising due to the omnipresence of IBOs in the marketplace. Therefore, more work is sorely needed. I plan to begin to fill in some of the gaps by focusing on feedback effects in an IBO and the impacts they have on the parent brands.

**Parent Brand Equity Asymmetry**

In addition to feedback effects, I introduce the concept of *parent brand equity asymmetry*, in which one brand in an IBO has a significantly larger amount of brand equity than the other, which could lead to unique evaluations of the parent brands and the IBO. Asymmetry exists at two points in time for parent brands: before engaging in an IBO (also known as *initial parent brand equity asymmetry*) and after an IBO (also known as *subsequent parent brand equity asymmetry*).

As I illustrate in Figure 1.4, asymmetry can exist in two configurations. First, the host can be significantly larger in equity than the ingredient. Examples of this type of IBO include Lay’s potato chips with K.C. Masterpiece barbecue flavoring and Chevron gasoline with Techron chemical additive. The opposite configuration is when the ingredient is significantly larger than the host. Examples this type of IBO include Shaw carpets with DuPont Stainmaster stain resistant treatment and Westcomb active outerwear with GoreTex waterproof material.
Asymmetry can create unique dynamics due to feedback effects: the relative equity of one parent brand can create feedback that differs greatly from the feedback generated by the other parent brand. This is a notion unique to IBOs; asymmetry does not exist in extensions due to the presence of only one parent brand. For instance, if Coca-Cola used an unknown artificial sweetener brand in its cola, the discrepancy in the two brands may create unique feedback effects. The IBO could be evaluated based more on what is known about Coca-Cola which would result in different feedback to the two parent brands. Alternatively, the gap between the

FIGURE 1.4
PARENT BRAND EQUITY ASYMMETRY TYPES

Asymmetric IBO 1: 
Host Larger Than Ingredient

Asymmetric IBO 2: 
Ingredient Larger Than Host

\[ H = \text{host brand} \]
\[ I = \text{ingredient brand} \]

Size indicates relative equity level
two parents may raise questions as to why Coca-Cola partnered with an unknown brand, which could also impact evaluations of the two parents in an unequal way. A few papers have briefly addressed asymmetry but it has not been fully examined. It has been shown that a more familiar partner has a stronger impact on IBO feedback effects (e.g. Simonin and Ruth 1998). Other work indicates that asymmetry does not harm parent brands (e.g. Washburn, Till, and Priluck 2000).

In spite of these works, the extant literature on asymmetry is limited. This is surprising because in reality most IBOs consist of partners with different levels of brand equity. However, it is an important issue because of extant research that recognizes the logic of working with unequal status partners (e.g. Baum et al. 2005; Castellucci and Ertug 2010; Li and Rowley 2002; Stuart 2000). In spite of the few studies that acknowledge its presence, a more complete understanding of the effects of largely unequal IBO parents is needed.

**Outcome**

Another issue that is pertinent to both extensions and IBOs is product performance, or *outcome*. For my purposes, I define outcome as the performance of a product in the marketplace. A product that sells well experiences a success; a product that sells poorly experiences a failure.

In the extension literature, work has addressed the benefits of successful brand extensions and the ramifications of failed ones. Research on extension success shows that well received extensions can have a positive impact on the parent brands under certain conditions (Balachander and Ghose 2003; Gurhan-Canli and Maheswaran 1998; Keller and Aaker 1992; Kumar 2005; Swaminathan, Fox, and Reddy 2001). By creating a successful extension product, the parent brand receives a residual increase in equity via feedback effects.

Regardless of the advantages afforded by success, work on extension failure indicates that poor extensions or negative information regarding them can have detrimental effects on the
parent brand (Gurhan-Canli and Maheswaran 1998; John, Loken, and Joiner 1998; Keller and Aaker 1992; Keller and Sood 2003; Lane and Jacobson 1997; Loken and John 1993; Park, Milberg, and Lawson 1991; Roedder John, Loken, and Joiner 1998). This research demonstrates that the extension and parent brand are indelibly linked, and negative extension outcomes can harm evaluations of the parent brand through negative feedback.

Despite the existing literature on the impact of performance outcomes on extensions, parallel work on IBO outcomes does not exist. IBO research has assumed that an IBO is a success and has simply measured evaluations of the IBO and subsequent parent brands (e.g. Simonin and Ruth 1998; Park, Jun, and Shocker 1996). Thus, the impact of an IBO outcome on feedback effects has not been directly addressed. More specifically, IBO failure has not been examined.

This is surprising because product failure is a very real issue for firms. Roughly 35-45% of all new products fail (Boulding, Morgan, and Staelin 1997). For IBOs, the failure rate could be higher due to considerable challenges an IBO faces. First, because there are numerous transfer effects, competition between these effects can lead to product failure. Consumers having to reconcile the relationships of two parent brands to the IBO instead of just one may introduce complications that are nonexistent in an extension. Second, brand asymmetry could make evaluations of the IBO complicated. If one parent brand is dominant over the other, questions of motive for the dominant brand may emerge, which could harm appraisals of the IBO.

These complexities demand attention because they can impact the parent brands. By exploring these issues, I aim to provide insight into their effects on the parent brands which can help managers in understanding what will happen to their brand after a failure, which should help them better develop and manage IBOs.
**Initiator**

An additional issue that deserves attention involves the order of entry into an IBO. In an IBO, as in a strategic alliance, one firm has to approach the other about starting the relationship. I refer to this firm as the *initiator*. The initiator likely begins the relationship because they see some value in the pairing of the two firms, such access to markets and resources. Therefore, they are motivated to join with the partner firm.

In the strategic alliance literature there is evidence to suggest that the brand that initiates the relationship takes the lead role in the alliance (Saxton 1997). Other research in the area of managerial decision making indicates that an initiator is indelibly tied to his or her product and is damaged by any related criticism about its offering (Tse et al. 1988). Taken together, this suggests that the initiator will accrue certain benefits and liabilities that are not present with the second brand in the relationship. However, to my knowledge there is no research that addresses the concept of the initiator in the IBO literature.

Understanding the impact of serving as an initiator will be an important addition to the literature on IBOs. It is possible that the initiator could have a disproportionate impact on feedback effects after an IBO outcome. The implications of this notion for managers are significant, and possibly suggest that being an initiator accrues risk not present for the non-initiator.

**IBO Fit**

A further factor that is crucial to extensions and IBOs is the notion of fit. Fit has been conceptualized in various ways in the extension literature, with all involving the compatibility between the parent brand and the extension, as shown in Figure 1.5. Perceptual fit involves the degree to which a brand extension is consistent with the parent brand (Tauber 1988). Another
definition of fit involves perceived similarity between the extension and the parent brand (University of Minnesota Consumer Behavior Seminar 1987). Fit has also been measured on three dimensions: by the degree to which the two product classes are complements, by the degree to which the two product classes are substitutes, and by the degree to which a firm in one product class is perceived to be able to operate (and create products) in the second product class (Aaker and Keller 1990). Research shows that fit is central to the evaluation of brand extensions (Aaker and Keller 1990; Boush and Loken 1991; Broniarczyk and Alba 1994; Keller and Aaker 1992; Mao and Krishnan 2006; Park, Milberg, and Lawson 1991). If the parent brand in an extension does not appear to fit (or be compatible) with the extension, then performance of both the extension and the parent brand can suffer.

The notion of fit applies to an IBO as well. Unlike an extension, in an IBO, there are two parent brands, which results in three dimensions of fit, as illustrated in Figure 1.6: between the host and IBO, and between the ingredient and IBO, and between the host and ingredient. For my purposes, I focus on the fit between the parent brands. Termed IBO fit, I adopt a previous
conceptualization and define it as the perceived cohesiveness between the parent brands (Simonin and Ruth 1998). Prior work has suggested that a high degree of IBO fit is necessary between the parent brands (e.g. Park, Jun, and Shocker 1996; Simonin and Ruth 1998). Other research has found that a high fit ingredient can improve the fit of a low fit host through being used together in an IBO (Desai and Keller 2002). A poor fit between parent brands, just like a bad fit between a parent and the IBO, can have detrimental effects. However, this type of fit has not been fully conceptualized nor empirically addressed.

Fit has been well established in the extension literature, yet my knowledge of fit in IBOs is lacking. Mirroring feedback effects, IBO fit issues are more complicated than in extensions. A

FIGURE 1.6
FIT DIMENSIONS IN AN IBO

![Diagram of fit dimensions in an IBO]

Host ← IBO

Ingredient ← IBO

Host ← Ingredient
basic knowledge of IBO fit has been developed, but many issues remain unexplored.

Overall, the lack of relevant work on IBOs and the relevant factors previously discussed is unexpected because of the importance of the IBO as a branding strategy. A trip down any supermarket aisle will find a consumer in the presence of countless IBOs, from cake mixes (Pillsbury cake mix with Hershey chocolate), to soft drinks (Diet Coke with Splenda artificial sweetener), to potato chips (Lay’s with K.C. Masterpiece BBQ flavor). IBOs are also common in other industries, including automobiles (Ford with Eddie Bauer leather interiors), home furnishings (Shaw carpets with DuPont Stainmaster treatments), home computers (Dell with Intel microprocessors), and clothing (Columbia outerwear with GoreTex waterproofing treatments). The omnipresence of IBOs raises countless interesting questions that demand exploration, involving the areas of interfirm relationships, market response to IBOs and their subsequent performance, the impact of individual difference factors on evaluations, the effect of product category, and the consequence of IBO brand naming conventions on evaluations.

PURPOSE

The purpose of this dissertation is to identify the major dynamics that exist within an IBO and how it plays out in market response. An understanding of how various IBO configurations play out in the marketplace has significant strategic implications for firms who are seeking an edge on the competition.

The dynamics between the parent brands in an IBO are unique. Because two firms are working together, there are pertinent issues that do not exist in an extension. In addition to the relationship between each parent and the IBO itself, there is also a relationship between the two parent brands. These concurrent dynamics suggest that IBO research could be viewed as a hybrid of the literature on extensions and interfirm relationships. There are numerous interfirm
dynamics in an IBO that could impact partner selection, such as access to markets, brand power, and the sharing of costs and resources. These issues could impact market response. For example, if one brand has a significantly larger level of equity than the other, the market may view the IBO differently than if the two brands were construed as equals. In spite of these interesting questions, to date these issues remain unexplored. Because of the importance of IBOs in the marketplace and the criticality of the relationships between partnering firms, it is vital to empirically investigate this broad topic. I add to the literature on IBOs by addressing a few major issues.

First, the major focus of this dissertation is the concept of IBO outcome and its impact on the parent brands via feedback effects. Because many new products do not survive, it is important to understand the repercussions when they fail. Therefore, the focus of this dissertation is more on failure than on success. Clearly, failures can have harmful feedback effects on the IBO parent brands.

Second, the notion of parent brand asymmetry is also explored. Toll House morsels in a generic brand of cookies would be an example of an asymmetric IBO, with Toll House having a larger amount of equity than the cookie brand. The relative strength of a parent brand could have a significant impact on feedback effects. A strong brand might have less to gain than a weak brand, thus resulting in larger feedback.

The initiator concept is also studied. As discussed previously, the initiator could be viewed as the “leader” of the IBO, which could create feedback effects that differ than those for a non-initiator. The initiator could undertake more perceived risk, which would enhance feedback effects.
Another issue that is addressed is IBO fit. The extant literature has begun to address this concept; however, more work is needed. For instance, IBO fit could play a significant role in an IBO failure, thus providing protection for the parent brands. Alternatively, it could work in the opposite direction. My goal is to understand how fit impacts IBOs, especially in a failure.

I also explore parent brand role. The role of the parent (host or ingredient) has not garnered much consideration. It seems reasonable that role should create unique effects for hosts and ingredients. The host brand may be viewed as more influential in an IBO than the ingredient and thus might garner stronger feedback effects. Alternatively, the ingredient could be viewed as an outsider brand and absorb more feedback, especially in an IBO failure.

Finally, I also compare feedback effects between IBO parent brands and brand extension parent brands. The extant research has provided evidence of the superiority of IBOs (e.g. Janiszewski and Van Osselaer 2000; Park, Jun, and Shocker 1996). However, it has not been addressed in the context of IBO failure. My aim is to show that IBO parent brands are more resistant to failure than are brand extension parent brands.

Taken together, these issues provide a crucial understanding of IBOs and how firms can align themselves. Both host and ingredient parent brands (whether high equity and low) can benefit from an IBO. The objective of this dissertation is to indicate the optimal configurations to maximize the benefits and minimize the risks of engaging in this type of branding strategy.

The extant literature has much to say on interfirm relationships from a B2B and strategic perspective. However, very little research exists on the impact of firms working together in creating new products from a market response context. This dissertation aims to begin to fill that gap by addressing the following questions in three essays (see Figure 1.7 for the overall model):
1. What impact does an IBO involving parent brand asymmetry have on feedback effects?

2. In such asymmetric conditions, how does an IBO failure impact feedback? Are the parent brands evaluated equally?

3. Also, in asymmetry, how important is a parent brand’s role (e.g. host or ingredient) in the evaluation of responsibility for an IBO’s performance? Specifically, does it matter if a parent brand is a host or an ingredient in terms of feedback effects?

4. What impact does being the IBO initiator have on feedback effects?

5. Finally, do IBO parent brands have inherent advantages over brand extension parent brands? Is this relevant for both success and failure? To what degree does IBO fit matter?
RESEARCH CONTEXT AND MOTIVATION

This dissertation is positioned in the context of market response. Of interest is how the market responds via feedback effects to various parent brand configurations in an IBO. The key focus of this work is on IBO failure. It is important to understand what happens to the parent brands in various configurations when the IBO is not successful.

This work is derived from the desire to decipher the dynamics in an IBO. IBOs are very common in the marketplace yet research on the topic is rather scant. A better understanding of how attributes of the parent brands in the relationship impact feedback effects is desperately needed. Further, the extant literature has not fully explained the differences between extensions and IBOs. Therefore, there exist many opportunities for contributions to the literature on IBOs from both consumer and firm perspectives.

Consumers may view an IBO from the perspective of the host or the ingredient. Most are host dominant (e.g. Diet Coke with Splenda sweetener), but others are ingredient dominant (e.g. Shaw carpet with DuPont Stainmaster stain protection). Therefore, each could evoke unique evaluations of the parent brands. A further understanding of this phenomenon will provide contributions on how consumers evaluate IBOs. However, this marketing strategy is also interesting from a firm perspective.

When firms enter into an IBO, their motivations may be different. For instance, a relatively unknown brand may desire a well known partner in order leverage expertise, market knowledge, and brand reputation. However, a well known brand may utilize a lesser known brand in order to capitalize on lower costs. Conversely, a brand may desire to initiate an IBO because they feel there is something to gain from the relationship and feel that initiating is the best way to achieve their goals.
Despite the importance of this research to firms, the purpose of this dissertation is not to explore the motivations behind entering into an IBO but rather to assess the impact of parent brand configurations and IBO performance on feedback effects. By gaining an understanding of the dynamics in play, my hope is to identify optimal parent brand configurations and provide strong implications and guidelines for managers.

My personal interest in pursuing this topic stems from the presence of two brands present in one product. It fascinates me to understand what motivates firms to partner instead of compete with one another. Additional, I am intrigued by the theoretical breadth with which to examine IBOs. They can be examined on issues of fit, equity, brand image, interfirm relationships, and strategic alliances, just to name a few. Therefore, I feel the opportunity for developing solid research contributions is boundless. I am also interested in IBOs due to the managerially relevant nature of the topic. It is possible to develop significant findings in this area that will assist managers in partnering, developing, and managing IBOs that will allow firms to capitalize on relationships with partners and also meet the needs and desires of consumers.

ORGANIZATION OF THE DISSERTATION

This dissertation is organized in a three essay format, with each essay intended to serve as a standalone work, organized in a logical progression. This chapter provides a critical understanding of ingredient branding, the relevant terms, and an overall conceptual framework that guides the rest of the document. In Chapter 2, disparate equity levels of parent brands are explored along with effects occurring after an IBO failure. Chapter 3 extends Chapter 2 by addressing the role of initiation in IBO and its impact on post-IBO feedback. Chapter 4 changes course and compares feedback effects between IBO parent brands and brand extension parent
brands. Chapter 5 recaps the dissertation, summarizes some overall conclusions, and suggests future areas for research.

Chapter 2 begins to address the research questions listed above. Parent brand equity asymmetry is introduced as a factor that can impact the outcome of an IBO. In addition, the notion of IBO failure is addressed. Finally, the effect of the role of the parent brand (host or ingredient) is examined (see Figure 1.8). The contention of this essay is that the ingredient brand is viewed as responsible for a failed IBO, which harms evaluations of the host more than the ingredient. In this situation, the ingredient is relatively shielded from the harmful effects of an IBO failure. However, if the IBO succeeds, a different feedback effect occurs in which the lower equity parent brand, regardless of it being a host or ingredient, experiences a larger gain in equity, as it is leveraging the position of the higher equity brand.
Chapter 3 extends Chapter 2 by adding IBO initiation to the model to show that the role of the parent brand is of less importance than the identity of the initiating parent of the IBO. Chapter 2 leaves the subject to decide who is responsible for an IBO’s success or failure. In Chapter 3, the subject is told who initiated the IBO, which leads to the initiator being viewed as a basis for assigning feedback effects, under certain conditions.
The contention of Chapter 3 is that the consumer will use the initiator to determine feedback effects under certain conditions, which leads to differing effects in success and failure (see Figure 1.9). Specifically, in a success, initiator influence is minimal, but in a failure, higher equity initiators result in less harmful feedback effects than lower equity initiators, regardless of whether the initiator is a host or ingredient.

**FIGURE 1.9**

**CHAPTER 3 MODEL**

![Chapter 3 Model Diagram]

**Controls:**
- Involvement
- Commitment

Chapter 4 provides an overall analysis of the question: “in terms of feedback effects, is an IBO a better strategy than a brand extension?” Specifically, this essay empirically examines the differences in feedback effects for IBO and brand extension parent brands under success and failure scenarios. Additionally, the concept of IBO fit is also addressed (see Figure 1.10).
Overall, the results indicate that in a success, IBO parent brands do not necessarily generate stronger feedback effects, but in a failure, IBO parent brands are protected from the ill effects of negative feedback. Further, IBO fit provides further protection under certain conditions to the point that an IBO can have poor IBO fit and receive similar feedback effects to a brand extension.

**MANAGERIAL IMPLICATIONS**

There are considerable implications involving an IBO that can help managers design products and be competitive in the marketplace. An IBO allows for quicker market development
because transfer effects allow the existing equity of parent partners to speed up market acceptance of the new product. This reduces the costs associated with learning about a new product because the feedback allows brand equity to already be present in the new product at launch. Because there are two parent brands, there are two feedback mechanisms linking to the IBO, so overall initial feedback is stronger than in an extension. Also, by partnering with another brand, firms can share costs associated with developing, selling, and guaranteeing the product. A shorter product development time is possible because utilizing an existing parent brand and sharing development activities is much quicker than developing the entire product in-house.

It is likely that monetary compensation will be required in order to use another firm’s branded ingredient (Desai and Keller 2002). An IBO can be viewed as a joint venture whereby the ingredient will require payment for the rights to use their product and brand name. However, if the host is very powerful and the ingredient relatively unknown, the host may be able to require payment for access to the exposure that the ingredient will receive as part of the IBO. An extension involves only one company, so this dynamic is not present.

Another major issue is control. With an extension, there is only one company involved. There is no partnership with another brand. However, with an IBO, there are multiple firms, thus the complexities of interfirm relationships arise. Two significant problems are (1) a host’s risk of withdrawal by the ingredient, and (2) an ingredient’s lack of control over marketing by the host (Desai and Keller 2002).

If the ingredient decides to leave the IBO, the host will lose the branded ingredient and will have to seek out another partner or develop the ingredient in-house. Further, any equity created by the IBO will be damaged and the host will be forced to begin again (Rao and Ruekert 1994).
The second problem is also significant. Because the ingredient is a component, in many cases marketing of the IBO will be controlled by the host. This could result in heavy promotion and communication of the host at the expense of the ingredient. However, the reverse might also be true. If the ingredient controls marketing of the IBO, the host might be harmed.

This research adds to the managerial implications of IBOs by showing that both the role and the equity of a parent brand in an IBO can have significant consequences. The results indicate situations in which (1) certain parent brand equity combinations and (2) host and ingredient brand roles are favorable or unfavorable, which should provide managers with additional information to aid in partner selection. Managers must not only be careful in choosing partners, but they must also consider what occurs if their product fails. It is possible that the risks might outweigh the potential rewards.

This dissertation also indicates that initiation also plays a significant role in feedback effects. Managers who initiate an IBO should understand that their equity level will determine how the parent brands are punished after an IBO failure. Therefore, before entering into an IBO, they should have a strong sense of how well their product will do in the market.

Finally, this work shows that an IBO is superior to a brand extension, especially in failure. The IBO parent brands will be shielded from a failure more than a brand extension parent brand. Therefore, especially with products with an uncertain chance of success, managers should consider an IBO strategy.

**SUMMARY**

In conclusion, in this dissertation I address major issues that are relevant to ingredient branding research. First, I examine the feedback effects that exist in IBOs. A subset of transfer effects, feedback effects can have significant impacts on the involved parent brands. Second, I
address the notion of IBO failure. Because most new products fail, it is important to identify
some of the potentially devastating effects of an IBO failure and to provide strategies that allow
firms to minimize the chances (and reduce the damaging impacts) of a failed ingredient branding
strategy. Third, I study the concept of brand asymmetry. Because most IBOs do not involve
exactly identical parents in terms of brand equity, it is important to understand what role equity
asymmetry plays in the evaluation of parent brands as well as the new brands they create
together. I also examine IBO initiation. It is vital to understand what happens to a parent brand if
they initiate an IBO. Finally, I inspect my contention that an IBO is a superior strategy to a brand
extension. This is a critical contribution because it will help managers decide which strategy to
undertake when desiring to introduce a new product to the market.
INTRODUCTION

Brand alliances, defined as the short or long-term association or combination of two or more individual brands, products, and/or other distinctive proprietary assets (Rao and Ruekert 1994), help marketers capitalize on established brand names, extend into new markets and industries, and gain new customers (e.g. Rao, Qu, and Ruekert 1999; Shocker, Srivastava, and Ruekert 1994). An increasingly popular particular form of brand alliance, ingredient branding, involves the incorporation of parent brand attributes as ingredients into another brand (Desai and Keller 2002). Sometimes referred to as joint branding, this strategy allows two brands to enter into a cooperative arrangement to increase reach, visibility, and competitiveness in the marketplace (Simonin and Ruth 1998). This permits two parent brands to integrate their features (and brand names) into the design or configuration of a new product which I refer to as the ingredient branded offering (IBO). I denote the two parent brands of the IBO as the “host” which refers to the main product and the “ingredient” which refers to the component that is built into the design of the host. For example, a Dell computer is a host product, an Intel microprocessor is an ingredient, and Dell with Intel Inside would be the IBO.
Past research on ingredient branding illustrates the determinants of IBO success (Desai and Keller 2002; Simonin and Ruth 1998) as well as their feedback or spillover on the host and ingredient brands (Park, Jun, and Shocker 1996). These effects, whether conceptualized as reciprocal, feedback or spillover, involve changes in consumer attitudes towards the original parent brands resulting from the IBO (Park, McCarthy, and Milberg 1993). Research hints that IBO feedback effects behave differently for the two parent brands. For example, Venkatesh and Mahajan (1997) suggest that different combinations of branded and unbranded components in a brand alliance will result in differing impacts on the parent brands. Generally, however, despite the critical implications of ingredient branding strategies for the parent brands, we still understand very little about the realities of IBO feedback effects.

A first source of concern in IBO feedback effects is how they impact the two parent brands should the IBO fail. While seminal works establish the existence of IBO feedback effects and highlight their importance (Desai and Keller 2002; Park, McCarthy, and Milberg 1993; Simonin and Ruth 1998), the extant IBO literature focuses on positive outcomes of ingredient branding strategies. Inherent in current research is the assumption that an IBO will always be a success. I could find no study investigating the impact of a failed IBO on the parent and ingredient brands. This is a key research gap because the realities of the market place indicate that new products often fail. Parent brand equity positions cannot completely insulate IBOs from the vicissitudes of the market. There are no guarantees for IBO success and indeed some IBO failure is inevitable. Given the importance of brands as strategic assets, understanding what IBO failure means to the parent brands in terms of feedback effects is critical.

A second source of concern in IBO feedback effects is the notion that ingredient branding strategies involve parents with differing levels of equity. Thus far, most extant research assumes
equal parent brand equity. Although it is possible that some IBOs may involve balanced parent brand positions, the reality of the market place is that many IBOs involve branded hosts and branded ingredients with asymmetric brand equities. In IBOs, differences in parent brand equity positions can be and often are large enough that the domination of one brand by another results. Venkatesh and Mahajan (1997) conjectured that various combinations of branded and unbranded components are highly consequential, suggesting that this issue is vital in IBOs. Some preliminary evidence suggests that disparate familiarity levels of IBO parent brands impact evaluation of the IBO (e.g. Simonin and Ruth 1998). In spite of this work, many unanswered questions remain regarding IBO feedback effects with asymmetrical parent brand equities.

I contend that in ingredient branding strategies, the potential for IBO failure and the possibility for parent brand equity asymmetry are marketplace realities and not at all uncommon. Thus, I advance the ingredient branding literature by investigating IBO feedback effects on parent brands when these key market place realities exist. Specifically, compared to success, I show the differential feedback effects of IBO failure on the parent brands and its impact on the host and ingredient brands. I also address parent brand equity asymmetries by exploring the feedback effects on the IBO parent brands when the parent brand equity involves asymmetry, i.e., either the host or ingredient parent brand equity is much stronger than the other. Finally, I theorize that the evaluation of an IBO (and subsequent feedback effects) in an asymmetric configuration occurs through differing processes for IBO success and failure. By investigating feedback effects in ingredient branding with the introduction of marketplace realities, I inform managers on the hazards and pitfalls of ingredient branding that can potentially introduce vulnerabilities to the firm’s most important strategic asset, the brand. By considering the very
real possibility of IBO failure and parent brand equity asymmetries, I offer managers a more balanced perspective to decision making regarding ingredient brand strategies.

This article is organized as follows: first, on the basis of theoretical notions in existing literature on brand extension evaluation and ingredient branding, I present the conceptual development and hypotheses. I then report the experimental methodology and follow with a discussion of the key results, implications and areas for future research.

CONCEPTUAL BACKGROUND

Why do firms or brands engage in ingredient branding? Park, Jun, and Shocker (1996) use a fictitious example of Slim-Fast chocolate cake mix by Godiva to argue that Slim-Fast could overcome obstacles in the cake mix category through an alliance with the Godiva brand. Godiva’s strength in delivering superior taste highly complements Slim-Fast's brand and enables product extensions. Godiva, on the other hand, can reduce its high-fat perception through association with a brand that has the opposite image. In addition, ingredient branding can signal high quality because the combined benefits of two high quality brands are thought to provide greater assurance about product quality than one alone (e.g. Desai and Keller 2002; Park, Jun, and Shocker 1996). Assuming that IBOs have a natural fit with the parent brand(s), research indicates that ingredient branding strategies might be the key to achieving favorable consumer evaluations (e.g., for a review, see Volckner and Sattler 2006). Along with these, ingredient branding offers an array of other advantages including enhanced differentiation and competitiveness, cost efficiencies and access to partner’s distribution channels (Norris 1992).

A key implication of ingredient branding strategies is that attitudes towards the originating parent brands transfer to the IBO (e.g., Simonin and Ruth 1998; Voss and Gammoh 2004; Washburn, Till, and Priluck 2000), particularly when the host and ingredient complement
each other (Park, Jun, and Shocker 1996). Interestingly, brand associations may also transfer between IBO parent brands (Simonin and Ruth 1998). In the earlier example of Slim-Fast chocolate cake mix by Godiva, the transfer can involve a positive influence where the association with Godiva may improve Slim-Fast’s image (Park, Jun, and Shocker 1996), or the transfer may be negative (Desai and Keller 2002), where Godiva’s image may be hurt by the association with Slim-Fast.

While the transfer of associations among brands involved in IBOs can occur in several ways, my research questions involve the particular form of transfer known as reciprocal (e.g., Loken and John 1993; Romeo 1991) or feedback effects (Desai and Keller 2002; Park, Jun, and Shocker 1996). In the brand extension literature, reciprocal or feedback effects are defined as changes in attitudes and beliefs regarding the originating brand caused by brand extensions (Park, McCarthy, and Milberg 1993). Feedback effects may involve either the negative or positive attitude changes (e.g., Balachander and Ghose 2003; Keller and Aaker 1992; Loken and John 1993). As with other brand association transfers, evidence suggests that consistency between the extension and the original brand influences both positive and negative feedback effects (e.g., Ahluwalia and Gurhan-Canli 2000; John, Loken, and Joiner 1998; Romeo 1991).

In this ingredient branding research context, feedback effects refer to changes in attitudes and beliefs regarding parent brands that result from the IBO. As in traditional brand extension contexts, feedback effects from IBOs can involve both dilution and enhancement. Building on information integration theory and attribution research, I suggest that consumers update evaluations of the parent brands based on the performance of IBOs. Importantly, I theorize that IBO feedback effects in certain situations can be different for the host and ingredient. In this research context, my conceptualization of IBO feedback effects is consistent with that of Desai

**HYPOTHESIS DEVELOPMENT**

The theoretical basis for my hypotheses derives from information integration theory, which describes the process by which stimuli are combined to form beliefs or attitudes (Anderson 1981). The underlying premise of information integration theory is that attitudes or beliefs are formed and modified as consumers receive, interpret, evaluate, and then integrate stimulus information with existing beliefs or attitudes. In the IBO context, similar to the brand extension literature, consumers can be expected to update their beliefs and attitudes about the original parent brand(s) when they are presented with additional information about the IBO.

In the past, in addition to positive feedback effects from successful brand extensions (Loken and John 1993), researchers have also studied feedback effects on the parent brand when the brand extension was unsuccessful in terms of sales volume generated (Keller and Aaker 1992), or in terms of product performance (Romeo 1991). In contrast to the brand extension literature, a majority of the extant literature on IBO feedback effects has always assumed IBO success, either by not specifying otherwise (e.g., Desai and Keller 2002), or by indicating high levels of IBO performance (e.g., Park, Jun, and Shocker 1996). Thus, the very real possibility of an IBO failure has not been addressed. Importantly, theory suggests that consumers would use failure information about IBOs, as well as success information, to make post-outcome brand equity evaluations of parent brands. Extending beyond this, because research indicates that consumers process negative information and positive information differently (Herr, Kardes, and Kim 1991), I argue that the consideration of positive information (IBO success) versus negative information (IBO failure) will result in differential IBO feedback effects for the originating
parent brands. Before developing the hypotheses depicting these more complex relationships, I set the stage for my conceptual advances with the more familiar case of IBO success.

Past research indicates that positive information about IBO success will lead to positive feedback for the parent brands. In the context of brand extensions, Keller and Aaker (1992) found that a successful extension improved evaluation of an average quality parent brand. Also, Loken and John (1993) suggest that brand enhancement can result when extensions are perceived positively. More recently, Balachander and Ghose (2003) showed that successful brand extensions led to more favorable evaluations of the original brand. Apparently, market acceptance of brand extensions results in consumer inferences of quality, expertise, and credibility in the product category for the originating brand (Burnkrant and Cousineau 1975; Cohen and Golden 1972). Therefore, successful extensions can help the parent company appear more expert and trustworthy, and can enhance the company’s marketplace credibility (Keller and Aaker 1992). Consistent with this logic as well as extant ingredient brand research (e.g., Desai and Keller 2002; Park, Jun, and Shocker 1996), I expect a similar positive feedback effect from the IBO. Specifically, a successful IBO should lead to enhanced brand equity for both parent brands.

Research on brand extensions has shown that negative information about extensions is detrimental to the family brand (Romeo 1991). Past research also indicates extensive evidence for the dilution effects of negative information (Ahluwalia and Gurhan-Canli 2000; John, Loken, and Joiner 1998; Loken and John 1993). Apparently, poor brand extensions present a certain degree of risk by potentially diluting consumer evaluations of the core brand (Sullivan 1990).

In IBOs, two brand names provide greater assurance about product quality than one alone (Park, Jun, and Shocker 1996), enabling IBOs to send a strong signal to consumers about the
substantially enhanced benefits of two quality brands as opposed to one (Desai and Keller 2002). This results in the formation of high expectations for the IBO. These prior expectations subsequently compare with the actual IBO performance information, providing the foundation for favorable or unfavorable evaluations about the brand (Churchill and Surprenant 1982; Oliver 1980; Oliver 1977). In the event of IBO failure, the negative information results in negative disconfirmation of the prior disproportionally inflated expectations, leading to consumer dissatisfaction with the IBO (Spreng, MacKenzie, and Olshavsky 1996). Dissatisfaction with the IBO likely results in negative feedback effects for both the parent brands. Fearing such effects, when Intel suffered problems with its Pentium microprocessors, personal computer brand partners such as Dell and Gateway 2000 became concerned about the negative feedback on their brands (Fisher 1994). Thus, I expect that negative information due to a failed IBO will lead to negative feedback effects on both the parent brands.

In light of the discussion on positive and negative information, I propose the following hypotheses:

H1: IBO outcome influences feedback effects such that:

H1a: IBO success leads positive feedback effects for both parent brands.

H1b: IBO failure leads to decreased negative feedback effects for both parent brands.

Partnering of two brands to form an IBO can result in a variety of configurations. These configurations are based on the status (host or ingredient) that the parent brands assume. Past research on IBOs based on the status of the parent brands suggests that the category of the new brand (the IBO) is perceived to be more similar to the host than the ingredient (Park, Jun, and
Shocker 1996). Thus, expectations of IBO performance and the resulting feedback effects derive from consumers’ focus on the host rather than the ingredient brand.

Another arrangement that can result with an IBO is based on parent brand equity asymmetries, one which has not been fully addressed in past IBO research. I conceptualize parent brand asymmetries as a significant and substantial gap between the equity levels of parent brands prior to introduction of the IBO. For example, if brand A and brand B are the host and ingredient parent brands, respectively, with an IBO, the following two configurations of brand asymmetry can emerge: high brand A equity paired with lower brand B equity or lower brand A equity paired with high brand B equity. From a consumer perceptions perspective, Venkatesh and Mahajan (1997) explored the possibility of asymmetric configurations when one of the IBO components was unbranded and found that branded component incongruity or domination by one of the components was troubling to consumers. Further, although not explicitly addressing asymmetry, Simonin and Ruth (1998) acknowledged the implications of differing levels of brand familiarity in an IBO illustrating that asymmetric contributions to IBO evaluation result. I extend that work and couple parent brand equity asymmetry with IBO success and failure information to explore the differential feedback effects of the parent brands.

New information on IBO performance outcomes leads to updating of attitudes and beliefs about the IBO parent brands. Because the IBO potentially generates new evaluations and associations, impressions derived from IBO performance information influence consumers’ evaluations of the parent brands (Simonin and Ruth 1998). Extending from this notion, the central premise underlying my arguments is that new information about IBO success or failure has the potential to trigger the specific mechanism that consumers use to arrive at differential feedback for the two parent brands. Importantly, however, the presence of parent brand equity
asymmetries plays a key moderating role. In other words, I not only argue that the factors influencing IBO feedback effects depend on whether the IBO succeeds or fails, but also that these factors manifest in the presence of the parent brand equity asymmetries that commonly occur in the marketplace. Specifically, I argue that consumers will anchor their feedback evaluations either on parent brand equity (high or low) or on the parent brand status (host or ingredient), and that this anchor differs depending on IBO performance information in conjunction with originating brand parent brand asymmetries resulting in differential IBO feedback.

A brand’s success is associated with quality, and has high relevance to consumer beliefs about brand equity. According to theory (Keller 2001), brand performance is central to building brand equity, and performance-related brand associations can also be formed indirectly through any source of information about the brand. Thus, new information about the success of an IBO triggers cues related to brand equity of the IBO, and induce the salience of parent brand equity asymmetry. Therefore, with IBO success, parent brand equity underpins consumers’ feedback evaluations. Drawing from information integration theory (Anderson 1981), I posit that consumers will update their beliefs about the brand equity of both parent brands through a process of accommodation (Crocker, Fiske, and Taylor 1984).

Further and importantly, in brand asymmetry, I anticipate a differential increase in the level of feedback effects on the parent brands. The literature on brand familiarity establishes the basis for the differential increase in feedback effects. According to Bettman and Sujan (1987), the degree of liking for a familiar brand is well established and stable because brand related experiences and associations are extensive. However, for brands that are relatively unfamiliar, preexisting attitudes may be either unformed or weak in terms of attitude strength and
accessibility (Fazio 1986; Fazio 1989). The effects of brand familiarity apply to brand equity as well because brand equity occurs when the consumer is familiar with the brand (Keller 1993). Thus, strong brand equity should result in differential effects in information processing and brand evaluation (Alba and Hutchinson 1987; Fazio 1986; Fazio 1989; Johnson and Russo 1984; Ratneshwar, Shocker, and Stewart 1987).

Accordingly, I argue that differences in parent brand equity will result in stronger positive feedback effects for the lower equity parent brand than for the higher equity parent brand. In the case of lower equity parent brands, since its existing network of associations is relatively small and currently weak in accessibility (Fazio 1986; Fazio 1989), the alliance evaluations represent new affective information that can add relevant brand specific associations (Broniarczyk and Alba 1994) to the lower equity parent brands. In other words, by virtue of its low equity, room for improvement is larger. For high equity parent brands, however, primarily due to the extensiveness of associations and strength of affect that the high equity and familiar brand already holds, attitudes towards the brand will be more resistant to change (Simonin and Ruth 1998). Therefore, I can expect lower equity parent brands to experience a greater increase in brand equity than the higher equity parent brands.

In earlier arguments I suggested that consumers associate the IBO more directly with the host than with the ingredient brand, and hence understand it as a member of the host brand category. Therefore, I expect that IBO success information will result in larger feedback for the host as compared to the ingredient. Juxtaposing the above to the effects of asymmetries in parent brand equities, it follows that under IBO success conditions, the expected positive feedback effects for low equity parent brands will be even higher when the low equity brand assumes the status of a host rather than an ingredient. Thus, in addition to the larger increases in brand equity
that low equity brands experience during post evaluations, consumers’ predisposition to anchor on the host results in a disproportionately larger increase for low equity host brands than for low equity ingredient brands. Based on the above discussions, with IBO success, the parent brand equity asymmetry should have a significantly different impact on feedback effects.

H2: Parent brand equity asymmetries moderate the relationship between IBO success and feedback effects, resulting in differential evaluations for the host and ingredient, where:

H2a: When the ingredient has higher parent brand equity, the host will experience a greater increase in feedback relative to the ingredient.

H2b: When the host has higher parent brand equity, the ingredient will experience a greater increase in feedback relative to the host.

H2c: A host with lower parent brand equity will experience a greater increase in feedback than ingredient with lower brand equity.

Under asymmetry, I argue that negative information due to IBO failure will result in consumers’ anchoring feedback on the status of the parent in the IBO (host vs. ingredient) rather than on parent brand equities. As I noted earlier, negative information due to IBO failure results in a violation of consumer expectations. In conjunction, research on impression formation suggests that negative information is perceived to be more diagnostic than positive information (Ahluwalia, Burnkrant, and Unnava 2000), and tends to have increased influence (Romeo 1991). Therefore, I argue that negative information manifests a different evaluation mechanism than positive information.

Drawing from attributional research which suggests that negative and unexpected events prompt attributional search more often than do positive events (e.g., Hastie 1984; Pyszczynski and Greenberg 1981; Wong and Weiner 1981), I believe that negative outcome valence and
expectation violation will trigger certain attributional activity (Roberson 2006). More specifically, negative (rather than positive) information and disconfirmed (rather than confirmed) expectancies have been shown to activate spontaneous causal attributions (Sanna and Turley 1996). Therefore, I argue that IBO failure information resulting in negative experiences and disconfirmed expectancies will motivate consumers to engage in attributional search, possibly with intent to punish the parent brand that they consider as being most responsible for the failure. Since the formation of IBO attribute information derives from the dominant concept (Park, Jun, and Shocker 1996), the host, consumers’ association of the IBO with the host brand category as opposed to the ingredient will result in holding the host mostly responsible for the IBO’s failure. In other words, since the IBO is highly typical of the host, consumers will view the IBO predominantly in terms of which brand assumes the host status, and attribute the failure to that parent brand. The host brand will therefore suffer stronger negative feedback effects irrespective of its parent brand equity strength. On the other hand, since the ingredient brand occupies the more subordinate role and is not associated as strongly with the IBO, it will not be subject to the degree of feedback degradation regardless of its parent brand equity. When an IBO fails, attributions will not anchor on the ingredient brand, and therefore the magnitude of the negative feedback will be smaller than that for the host. Therefore, different from an IBO success, with an IBO failure the host should always receive a more negative evaluation than the ingredient.

H3: Regardless of asymmetries in parent brand equities, with a failed IBO the host brand will experience stronger negative feedback than the ingredient brand.

Finally, building on the logic in H2 and H3, IBO outcome and parent brand equity asymmetry will both have an impact on feedback effects, creating unique feedback for
the host and ingredient. Because consumers tend to focus on the parent brand equities in a success yet on the host in a failure, the impact of the parent brand equity asymmetry is dependent on the outcome of the IBO. Specifically, in the IBO success condition, parent brand equity asymmetry should impact feedback effects, such that the low equity partner brand will gain more than the high equity partner brand. In the IBO failure condition, parent brand equity asymmetry should have no effect, therefore always leading to a more negative evaluation of the host than the ingredient.

H4: The moderating effect of IBO parent brand equity asymmetry varies according to IBO outcome, such that with IBO success, parent brand equity asymmetry moderates feedback effects, and with a failure, it does not.

METHODOLOGY

I examined the predictions about feedback effects of IBOs in experiments conducted with students from a large public university in the Northwestern United States. Two studies were conducted to test my hypotheses concerning the effects of IBOs formed by differing levels of equity on the host and ingredient, and the effects of IBO performance outcome and parent brand equity asymmetry on these relationships (see Figure 2.1). Study 1 used fictitious brands and Study 2 used existing brands to enhance the robustness of my findings.
STUDY 1

Pretests

Before commencing Study 1, I conducted a series of pretests to (1) find reasonable pairs of host and ingredient brands of both low and high equity levels to form the different IBOs and

FIGURE 2.1

MODEL
(2) develop appropriate manipulations to test the hypotheses. Pretests were conducted using graduate and undergraduate students selected from different subject pools.

Pretest 1. The purpose of this pretest was to identify suitable product categories and brand names for the experiments and test the validity of my manipulations. Twenty one subjects from a graduate level marketing course participated in a series of focus groups in exchange for course credit. Subjects were exposed to the stimuli followed by a probing question and answer session, which helped gain feedback about their impressions of the stimuli. I wanted to select product categories that were reasonable in familiarity and product preference. Findings from this pretest suggested several categories and brand names to be used for the fictitious host and ingredient. Cookies and chocolate were chosen as the host and ingredient brands, respectively, after analyzing the transcripts of the focus group discussion. The focus group chose County Fair (53.8% of respondents) and Auntie’s (76.9%) cookies as host brand names and Sweet Goodness (57.1%) and Chocolicious (46.7%) chocolate as ingredient brand names. The subjects also confirmed the plausibility of the various success scenarios and gave suggestions to make the failure manipulations more convincing.

Pretest 2. The purpose of pretest 2 was to examine subjects’ reactions to the modified scenarios and thus evaluate the validity of my failure manipulations. The stimuli were administered to 43 undergraduate students in exchange for course credit. Subjects assessed brand equity of the IBO after a success or failure using a three item seven point Likert scale with the questions “the IBO is a successful product” and “the product is a failure” using 1 = strongly disagree and 7 = strongly agree and “how would you rate the performance of the product” using 1 = total failure and 7 = total success ($\alpha = .96$, $M = 4.19$, $SD = 2.38$). Results indicated that there
was a significantly larger evaluation of the IBO after a success than after a failure ($t(41) = 11.17$, $p < .001$).

**Design and Procedure**

To test the hypotheses, I first performed a 2 (IBO parent brand equity asymmetry type: host larger than ingredient vs. ingredient larger than host) x 2 (IBO outcome type: failure vs. success) x 2 (feedback comparison: host and ingredient) mixed experimental design. The first two factors are between-subject and the third is a within-subject factor. For the feedback comparison factor, subjects were asked to rate both the host and ingredient brands. Two hundred four undergraduate students participated in Study 1 in exchange for course credit. All subjects were randomly assigned to one of four between-subject conditions. The experiment took approximately 10 minutes, and the participants were debriefed at the end of the semester.

All subjects were introduced to a set of fictitious brands belonging to two different product categories, cookies and chocolate, through the use of a magazine article. The subjects were asked to carefully read the article at their own pace. The article provided “state of the category” information for both cookies and chocolate, including information on brand equity for each product. Specifically, the subjects were told:

> Brandview, the publisher of the magazine article you just read, would like to collect your opinions about the article and also your cookie/chocolate preferences so they can prepare further research reports for their clients. You will be asked questions about various brands from the article.

A sample copy of the article used to introduce the partner brands is depicted in Appendix A. Subjects then evaluated the two brands on two seven point scales measuring perceived product quality and perceived brand equity (Yoo, Donthu, and Lee 2000). This measure was used as a manipulation check to assess parent brand equity for the host and ingredient brands. A
filler task was then introduced to disguise the purpose of the study, where the subjects were
asked to indicate their level of knowledge and interest in cookies.

Subjects were then exposed to the success or failure manipulation using a scenario that
contained information about brands that appeared in the article. Each subject saw one of the two
parent brand equity asymmetries of host and ingredient brands. The brands of cookies
represented the host (i.e., County Fair for high equity, Auntie’s for low equity), whereas the
chocolate brands constituted the ingredient brand (i.e., Sweet Goodness for high equity, and
Chocolicious for low equity). Failure and success were manipulated (1) based on friend
recommendations (success: good taste, failure: poor taste), and (2) its performance in the market
(success: successful earnings, failure: product discontinued). The market failure information was
embedded in an actual newspaper clip that included other brand failures. A version of this
manipulation is in Appendix B. After being exposed to this stimulus, the subject answered
questions about the brand equity of the host and ingredient after the failure or success.

**Manipulation Checks**

We summed up the initial scores on the initial perceived quality and brand equity scales
across all conditions ($\alpha = .97$, $M = 3.87$; $SD = 1.77$). As expected, the high equity host brand was
found to have a higher score than that of the low equity host brand (host: $M_{high\ host} = 4.94 > M_{low\ host} = 2.69$; $t(412) = 18.24; p < .001$). I also found similar results for the ingredient brand: the
high equity brand received a higher score than the low equity one (ingredient: $M_{high\ ingredient} = 5.33 > M_{low\ ingredient} = 2.53$; $t(412) = 23.68; p < .001$). Overall, the initial brand equity
manipulations were successful.
Dependent Measure

The dependent measure for the study represented an upward or downward evaluation in the ingredient and host brand equity after the IBO failure or success (i.e., feedback). I used a single item that prompted subjects to reassess their previous evaluations by indicating how much better or worse they evaluated the host and ingredient brand equity on an eleven point scale. This scale is anchored by “extremely better” (coded +5) at one end, “extremely worse” (coded -5) at the other end, and “the same” (coded 0) in the middle. This scale is appropriate because it maximizes the variance in the dependent variables and prevents potential ceiling/floor effects. For instance, if a host product was evaluated poorly before an IBO failure, the use of the same seven point scale would limit the ability to evaluate this brand even more negatively.

Test of Hypotheses

To test the hypotheses, I performed a 2 (IBO parent brand equity asymmetry type: host larger than ingredient vs. ingredient larger than host) x 2 (IBO outcome type: success vs. failure) x 2 (feedback comparison: host and ingredient) mixed ANOVA. The means are illustrated in Figure 2. I find a significant within-subject effect of feedback comparison ($F[1, 203] = 12.72; p < .001$). There is also a general between-subjects effect of IBO outcome type ($F[1, 203] = 502.17; p < .001$) on the average level of feedback. The between-subjects main effect of parent brand equity asymmetry on brand equity was not significant ($F[1,203] = .03, p > .10$). However, the interaction between IBO outcome and parent brand equity asymmetry was significant ($F[1, 203] = 10.78, p < .001$). An interaction exists between feedback comparison and parent brand equity asymmetry ($F[1, 203] = 49.98, p < .001$). Another interaction occurs between feedback comparison and outcome ($F[1, 203] = 10.16, p < .01$). The three-way interaction between parent
brand equity asymmetry, IBO outcome, and feedback comparison is significant ($F[1, 203] = 35.56, p < .001$). In the next paragraphs, I explain how these results offer a test of the hypotheses.

H1 posits a significant impact of IBO outcome on feedback effects. Follow up hypothesis H1a predicts that with an IBO success, both parent brands will experience positive feedback and H1b predicts that an IBO failure will lead to negative feedback for both parent brands. To test these propositions, a 2 (IBO outcome type) x 2 (feedback comparison) mixed ANOVA was utilized. A significant effect of feedback comparison exists ($F[1, 205] = 9.45, p < .002$). The data also indicate a significant main effect of outcome on parent brand evaluation ($F[1, 205] = 479.68, p < .001$), providing support for H1. The interaction between feedback comparison and IBO outcome was also significant ($F[1, 205] = 8.05, p < .01$). Evaluations of brands with an IBO success are both significantly different from zero and positive for both the host ($M_{host} = 1.84, t(108) = 9.98, p < .001$) and the ingredient ($M_{ingredient} = 1.88, t(108) = 11.28, p < .001$), and significantly different from zero and negative for both the host ($M_{host} = -2.76, t(97) = -18.02, p < .001$) and ingredient ($M_{ingredient} = -1.84, t(97) = -9.99, p < .001$) with an IBO failure, supporting H1a and H1b.

H2 posits that with an IBO success, parent brand equity asymmetry moderates feedback effects, resulting in the following outcomes: (H2a) when the ingredient is larger than the host, the host experiences a larger gain than the ingredient, (H2b) when the host is larger than the ingredient, the ingredient achieves a larger gain than the host, and (H2c) a low equity host gains more than a low equity ingredient. A 2 (parent brand equity asymmetry) x 2 (feedback comparison) mixed ANOVA for the success condition only was used to test the hypotheses. The main effect of feedback comparison is not significant ($F[1, 107] = 0.14, p > .10$), but the main effect of parent brand equity asymmetry is significant ($F[1, 107] = 6.13, p < .05$). However, the
results show a significant interaction between feedback comparison parent brand equity asymmetry ($F[1, 107] = 76.00, p < .001$), supporting H2. When the ingredient is larger than the host, the host gains more than the ingredient ($M_{host} = 2.93 > M_{ingredient} = 1.44, t(54) = 5.58, p < .001$), and when the host is larger than the ingredient, the ingredient gains more than the host ($M_{host} = .74 < M_{ingredient} = 2.33, t(53) = -6.89, p < .001$), in support of both H2a and H2b (see the success side of Figure 2.2). Comparing the low equity brands, the low host gains more than the low ingredient ($M_{host} = 2.93 > M_{ingredient} = 2.33, t(107) = 1.98, p = .05$), providing support for H2c.

**FIGURE 2.2**

**HYPOTHESIS 4, STUDY 1**
H3 predicts that with an IBO failure, the host will incur stronger negative feedback effects than the ingredient, regardless of parent brand asymmetry. The same factors from the mixed ANOVA from H2 were used to test H3, but this time in the failure condition. The data indicate a significant main effect of feedback comparison \( (F[1, 96] = 19.92, p < .001) \), and a significant main effect of parent brand equity asymmetry \( (F[1, 96] = 4.74, p < .05) \) on parent brand evaluation. However, the interaction between feedback comparison and parent brand equity asymmetry is not significant \( (F[1, 96] = 3.00, p > .05) \), in support of H3. The host received the larger decrease in both the host larger than ingredient \( (M_{host} = -2.65 < M_{ingredient} = -1.39, t(50) = -3.88, p < .001) \) and ingredient larger than host \( (M_{host} = -2.87 < M_{ingredient} = -2.32, t(46) = -2.37, p < .05) \) conditions (see the failure side of Figure 2.2).

As illustrated in Figure 2, H4 posits that the moderating effect of IBO parent brand equity asymmetry is moderated by IBO outcome, such that asymmetry moderates feedback effects in an IBO success, but in a failure, the effect of asymmetry does not moderate the relationship. In support of H4, the model indicates a three-way interaction between parent brand equity asymmetry, IBO outcome, and feedback comparison, \( (F[1, 203] = 35.56, p < .001) \). As expected from H2, the moderation exists in the success condition, and consistent with H3, moderation does not exist in the failure condition.

**Discussion of Study 1**

In Study 1, I assessed the impact of IBO outcome and parent brand equity asymmetry on differential feedback effects. Overall, results support my contention that IBO outcomes and differing levels of parent brand equity asymmetry have a significant impact on the evaluation of the host and ingredient. Results of the data analysis indicate that the evaluations of the host and ingredient, the parent brand equity asymmetry, and IBO outcome interact with one another,
showing that the IBO outcomes and the asymmetries are both drivers of feedback effects. Specifically, IBO outcome has a significant impact on the evaluation of the partner brands, with a successful IBO enhancing perceived equity of the parent brands and a failed IBO harming the parents. The data also show that in the presence of asymmetry, the smaller equity brand receives a higher increase in equity than the larger equity brand when the IBO is a success. Also within the success condition, a low equity host receives a higher increase in brand equity than a low equity ingredient, due to the IBO’s similarity to the host. However, within the failure condition, the host brand incurs greater equity damage than an ingredient brand, regardless of asymmetries.

**STUDY 2**

**Overview**

The purpose of Study 2 was to replicate Study 1 by replacing the high equity fictitious brands with existing brands. Support for the hypotheses using existing brands would provide additional support for the effects found in Study 1 and alleviate potential problems with the use of fictitious brands. I chose to keep the fictitious brands for the low equity condition because it would guarantee a low level of familiarity for the brand and thus reinforce the “low equity” status of the fictitious brand.

**Pretest**

The purpose of this pretest was to select appropriate existing brands for Study 2. I wanted to select brands that were high in familiarity. Thirty two subjects were given a series of cookie and chocolate brands to assess familiarity. Familiarity was assessed using a seven point scale with 1 = highly unfamiliar at one end and 7 = highly unfamiliar at the other end. Results indicated that Chips Ahoy ($M = 6.26, SD = 1.21$) was a significantly more familiar cookie brand than Grandma’s ($M = 5.13, SD = 1.64$) and Famous Amos ($M = 4.84, SD = 2.23$). Hershey ($M = 5.13, SD = 1.64$) was
6.71, \(SD = 0.64\) had the highest familiarity among the chocolate brands, followed by Toll House \((M = 6.19, SD = 1.48)\), Godiva \((M = 5.29, SD = 2.01)\), and Ghirardelli \((M = 4.81, SD = 2.54)\). Based on the results of the pretest, Chips Ahoy and Toll House were chosen as the two high equity brands for Study 2. To control for equity differences among the existing brands, Toll House was chosen over Hershey (and its higher familiarity score) due to its statistical similarity to Chips Ahoy (Toll House and Chips Ahoy: \(t(30) = .23, p > .10\); Hershey and Chips Ahoy: \(t(30) = 2.72, p < .05\)).

**Experimental Procedure**

One hundred seventy four students were recruited from undergraduate marketing classes at two Northwestern universities in exchange for course credit. In this study, subjects were provided the same set of stimuli as in Study 1, except that the scenarios were modified by replacing the high equity fictitious brands with existing brands. In addition, the instructions were changed to reflect the inclusion of existing brands.

The procedures in Study 2 are identical to Study 1. A 2 (IBO outcome type) x 2 (parent brand equity asymmetry type) x 2 (feedback comparison) mixed experimental design was used. As in Study 1, subjects were asked to evaluation both the host and ingredient brands. Subjects were randomly assigned to one of the four conditions, with existing high equity brands substituting for the fictitious high equity brands.

**Manipulation Checks**

Manipulation checks for Study 2 were the same as in Study 1. The initial scores on the perceived quality and brand equity scales \((\alpha = .96, M = 3.47, SD = 1.57)\) across all conditions mirror Study 1. The high equity brand had a higher score than the low equity brand (host: \(M_{\text{high equity}} = 4.32 > M_{\text{low equity}} = 2.43, t(346) = 14.88; p < .001\)). The results for the ingredient brand
were similar (ingredient: $M_{\text{high equity}} = 4.52 > M_{\text{low equity}} = 2.58$, $t(346) = 14.16; p < .001$). As in Study 1, the scenarios in Study 2 successfully manipulated brand equity.

**Test of Hypotheses**

To control for effects of category knowledge, a single item measure was created. Prior research suggests that individuals with low product category knowledge are less likely to expend the mental effort required to make a full evaluation of attributes (Park and Lessig 1981; Ratneshwar, Shocker, and Stewart 1987). Therefore, it was important to measure knowledge within the category. The item asked “how would you rate your knowledge of cookies and cookie brands,” anchored by 1 = not knowledgeable at all and 7 = expert knowledge ($M = 3.70$, $SD = 1.30$). In Study 1, controlling for category knowledge was not necessary due to the presence of fictitious brands negating the effects of this individual difference. Controlling for category knowledge, a 2 (IBO outcome type) x 2 (parent brand equity asymmetry type) x 2 (feedback comparison) mixed ANCOVA illustrates a significant effect of feedback comparison ($F[1, 168] = 8.51, p < .005$). There is a significant main effect of IBO outcome ($F[1, 168] = 245.94, p < .001$), no significant main effect of parent brand equity asymmetry ($F[1, 168] = .79, p > .10$), and no significant interaction between IBO outcome and parent brand equity asymmetry ($F[1, 168] = 1.57, p > .10$). See Figure 2.3 for the means. An interaction exists between feedback comparison and IBO outcome ($F[1, 168] = 5.14, p < .05$), but not between feedback comparison and parent brand equity asymmetry ($F[1, 168] = 1.02, p > .10$). However, the three-way interaction between IBO outcome, brand equity asymmetry, and feedback comparison was significant ($F[1, 168] = 33.86, p < .001$).
A 2 (IBO outcome type) x 2 (feedback comparison) mixed ANCOVA was used to test H1. Results indicate a significant main effect of feedback comparison ($F[1, 170] = 4.60, p < .05$), a significant main effect of IBO outcome on brand evaluations ($F[1, 170] = 244.13, p < .001$), and a significant interaction between feedback comparison and IBO outcome ($F[1, 170] = 5.27, p < .05$). The significant impact of IBO outcome indicates support for H1. Support is also provided for H1a ($M_{host} = 1.93, t(87) = 9.61, p < .001, M_{ingredient} = 1.56, t(87) = 7.14, p < .001$) and H1b ($M_{host} = -2.08, t(85) = -10.59, p < .001, M_{ingredient} = -1.64, t(85) = -7.39, p < .001$).

To test H2, a 2 (parent brand equity asymmetry type) x 2 (feedback comparison) mixed ANCOVA for the IBO success condition only was used. Results show a marginally significant
impact of feedback comparison ($F[1, 85] = 3.16, p < .10$), a non-significant effect of parent
brand equity asymmetry ($F[1, 85] = .11, p > .10$), and more importantly a significant interaction
between feedback comparison and parent brand equity asymmetry ($F[1, 85] = 25.04, p < .001$).
Support for H2 is provided by the significant interaction. When the ingredient is larger than the
host, the host experiences a larger gain ($M_{\text{host}} = 2.46 > M_{\text{ingredient}} = 1.00, t(45) = 4.89, p < .001$)
and when the host is larger than the ingredient, the ingredient gains the most ($M_{\text{host}} = 1.36, <
M_{\text{ingredient}} = 2.17, t(41) = -2.23, p < .001$), supporting H2a and H2b (see the success side of Figure
2.3). However, the data fail to support H2c ($M_{\text{host}} = 2.46 \approx M_{\text{ingredient}} = 2.17, t(86) = .70, p > .10$).

A 2 (parent brand equity asymmetry type) x 2 (feedback comparison) mixed ANCOVA
in the failure condition only was used to test H3. The data indicate a significant main effect of
feedback comparison ($F[1, 82] = 5.20, p < .05$), a non-significant main effect of parent brand
equity asymmetry ($F[1, 82] = 2.03, p > .10$) and a significant interaction between feedback
comparison and parent brand equity asymmetry ($F[1, 82] = 11.16, p < .01$). The presence of the
interaction leads to a reject of H3. In the ingredient larger than host condition, negative feedback
to the host is significantly stronger ($M_{\text{host}} = -2.26 < M_{\text{ingredient}} = -1.09, t(45) = -3.42, p < .01$), but
counter to my proposition, negative feedback to the host is not significantly stronger than to the
ingredient in the host larger than ingredient condition ($M_{\text{host}} = -1.88 \approx M_{\text{ingredient}} = -2.28, t(39) =
.98, p > .10$) (see the failure side of Figure 2.3).

To test for H4, the three-way interaction between IBO outcome, parent brand equity
asymmetry, and feedback comparison must be significant. Figure 2.3 illustrates the result. The
data confirm my proposition ($F[1, 168] = 33.86, p < .001$). My prediction states that the host
brand will always incur a larger decrease than the host in the failure condition. However, follow
up analyses (see the results of H3) indicate that the prediction does not hold, due to the host
brand equity decrease being smaller than the ingredient brand when the host is larger than the ingredient. Therefore, although a significant three-way interaction exists, the means fail to provide support for H4.

**Discussion of Study 2**

In Study 2, I manipulated high brand equity through the use of existing brands and low equity via fictitious brands and found mixed results. IBO outcome and parent brand equity asymmetry have significant impacts on the evaluations of the parent brands with an IBO success. However, when comparing a low equity host to a low equity ingredient with an IBO success, the results are less clear. The feedback means are in the predicted direction, but there is no significant difference between the host and ingredient. The results with an IBO failure do not support the hypothesis, with the means reversing in the host larger than ingredient condition, but holding when the ingredient is larger than the host.

The influence of IBO outcome is consistent with Study 1, which provides evidence of feedback effects on the parent brands after an IBO success or failure. This indicates that all brands are subject to positive feedback when an IBO succeeds and no brand is insulated from negative feedbacks in a failure.

The role of parent brand equity asymmetry also mirrors Study 1, showing that in a success, the lower equity brand in the IBO receives a larger evaluation increase than the higher equity brand. These effects indicate that lower equity brands stand to gain from partnering with a high equity brand and that even though high equity brands gain less than their low equity partners, they still gain from an IBO.
Contrary to Study 1, in Study 2 negative feedbacks do not always have a strong effect on the host brand. Theoretical considerations and explanations for this null result are explored in the next section.

**DISCUSSION**

In this article, I address two key gaps in the ingredient branding literature, the impact of IBO failure and the effect of asymmetry on feedback effects. These issues are important because both are not only plausible but highly likely scenarios in the marketplace. My goal was to fill the gaps in the extant literature and show that both IBO failure and parent brand asymmetry significantly impact feedback to the parent brands with an IBO. In so doing, I not only fill key gaps but also answer recent calls for more research on ingredient branding and its implications on customer reactions (e.g. Keller and Lehmann 2006).

Our results highlight a number of important findings. First, suggesting that the possibility of IBO failure cannot be dismissed, I show that IBO outcome, whether success or failure, has a significant impact on the evaluation of the parent brands. Consistent with past research (e.g. Simonin and Ruth 1998), I find that IBO success generates positive feedback and results in positive feedback. Perhaps as importantly, I find IBO failure results in negative feedback, that is equity decreases. Consumers have an expectation that an IBO will be successful, and when it is not, the parent brands are held liable. Consistent with information integration, the negative information from a failed IBO leads consumers to update their evaluations of the parent brands, leading to equity reduction. Thus IBO failure may substantially jeopardize parent brand positions. Interestingly though not integral to my research focus, I find evaluations of the parent brand deriving from the IBO play out differently in feedback effects, with differential impacts between the host versus the ingredient role regardless of IBO success or failure.
Another major finding of this work involves the notion of brand asymmetry. With an IBO success, though both parents enjoy positive feedback effects, the lower equity brand, regardless of whether it is the host or ingredient, enjoys the larger positive feedback than the higher equity brand. Interestingly however, if the lower equity brand is the host, that host brand enjoys a larger feedback boost than the ingredient gains if that ingredient is the lower equity parent brand. In other words, according to the results, low equity hosts stand to gain more from a successful IBO than low equity ingredients.

A key implication and perhaps my major contribution to the literature involves the assessment of parent brand equity asymmetry when the IBO fails. Essentially I find a different pattern of effects for negative feedback than for positive feedback. Despite asymmetries between parent brands being inevitable, Study 1 indicates that a failed IBO results in more negative feedback to the host than to the ingredient, irrespective of parent brand asymmetries. Since the IBO is deemed more similar to the host than the ingredient (Park, Jun, and Shocker 1996), a connection is made between the host and IBO. In the wake of a negative event (i.e. IBO failure), individuals seek out the source of the failure (i.e. Wong and Weiner 1981), due to negative information being more diagnostic (Ahluwalia, Burnkrant, and Unnava 2000). Following this logic, a failed IBO leads to a more negative evaluation for the host than the ingredient. Focusing on the parent role (host vs. ingredient) negates the impact of asymmetry. As a result, an IBO is clearly riskier for the host than the ingredient. The important take away is that when an IBO fails, the host is the bigger loser, receiving stronger negative feedback than the ingredient, regardless of relative positions of the two parent brands.

However, the lack of an parent brand asymmetry effect with IBO failure found in Study 1 is not fully consistent with the Study 2 results. When the host is larger than the ingredient, the
higher equity host (an existing brand) did not appear subject to the same degree of negative feedback as in the first study. I conjecture that an extremely high equity host brand with an unknown ingredient brand may create a gap so large (larger than in Study 1) that the initial superior reputation and expertise of the host insulates it from negative feedback effects. Despite manipulating high equity brands in Study 1, subjects have existing category brand knowledge, which may prevent the fictitious brands in Study 1 from being evaluated as highly as the existing brands in Study 2. This could create a larger partner brand equity gap in Study 2 than in Study 1. This suggests that an extremely high equity host brand, contrary to my predictions, might be somewhat insulated from damaging IBO failure feedback effects if paired with a low brand equity ingredient. Future research should address the magnitude of the gap between the host and ingredient parent brand equities. Results could provide further insight into the nature of the relationship between the parent brands.

Other interesting ingredient branding questions remain. A future study should also explore message format used to inform of an IBO failure. Consumers learn of a failed product via many means, including word of mouth, news outlets, corporate press releases, and personal experience. It is likely that each of these methods has differing impacts on feedback effects. Another area for future examination is parent brand resilience in the wake of IBO failures. The results indicate that parent brands are insulated from negative feedback effects in certain situations. However, this work does not address repeat failures. It is possible that circumstances exist in which parent brands may withstand multiple IBO failures. Answers to these questions will further understanding of the dynamics and nature of the relationship between parent brands.
Managerial Implications

For brand managers, I offer key implications for developing ingredient branding strategies. An IBO allows a brand to capitalize on the expertise and brand equity of their IBO partner. However, failed IBOs have far reaching ramifications. Importantly, the results indicate that managers must be cognizant that ingredient branding is not a risk-free strategy. While risk is shared by the partners, it does not insulate the parent brands from the potentially hazardous ramifications of IBO failure. Consumer expectations for an IBO may be overly inflated due to the involvement of at least one well established brand (Desai and Keller 2002; Park, Jun, and Shocker 1996). Failure to meet these expectations can result in backlash, severely harming the parent brand equity positions. Therefore, a brand cannot free ride on the position of another parent brand. An IBO failure can negatively impact any brand regardless of host or ingredient role. Thus, firms should be diligent in brand partner selection and management of the IBO. For the host brand, the impetus on careful partner selection is magnified, as an IBO failure damages the host more than the ingredient. Therefore, risk with an IBO is higher for the host partner brand. The ingredient brand is partially shielded from risk, allowing more partner selection options.

Our research offers implications for both low and high equity parent brands. A lower equity parent can capitalize on the association with a higher equity partner. Through leveraging the higher equity parent brand’s position, the lower equity parent can enhance its own brand equity. Brand associations are formed through the presence of the two parent brands joined in the IBO. A successful IBO boosts the lower equity brand’s reputation, which can enhance evaluations of other products in the brand’s portfolio. For higher equity brands, parent brand equity can increase even further. Common logic would suggest that a higher equity brand might
be penalized for its association with a lower equity brand, yet this scenario does not emerge in the data. This notion should persuade managers of higher equity brands to consider and seek out potential IBO partners that have lower brand equity. This configuration also has residual benefits for the higher equity brand. By serving as the leverage partner in an IBO, the higher equity brand can negotiate lower costs, lower risk exposure, and other advantages afforded by its superior equity position.

For managers, potential payoffs versus potential rewards must be assessed. My work indicates that an IBO is riskier for a host than for an ingredient. Due to impressions that the brand is responsible for the IBO, a failure can disproportionately punish the host (vs. the ingredient). Conversely, the ingredient is somewhat shielded from failure by the host. In a successful IBO, the potential payoffs for a brand depend on its relative position to the other parent brand. In an IBO success, the lower equity brand gains more, but the higher equity brand also gains. For the host brand, the assessment of risk versus return is crucial. Potential gains from a successful IBO for a higher equity host are less than for a lower equity host, yet both are exposed to the same risk from an IBO failure. Therefore, a higher equity host is in a less advantageous position.
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CHAPTER 3

THE IMPACT OF EQUITY ASYMMETRY AND PARTNERSHIP INITIATION ON COLLECTIVE FEEDBACK EFFECTS IN INGREDIENT BRANDING

INTRODUCTION

As the marketplace becomes increasingly fragmented and competitive, firms are constantly seeking new ways to gain and maintain market share. One growing strategy that firms can initiate to help them compete is ingredient branding. This collective strategy, which is a form of brand alliance, involves one brand being incorporated into another brand as an ingredient (Desai and Keller 2002). Ingredient branding has resulted in a broad array of products, including Betty Crocker cake mix with Hershey’s chocolate, Ford vehicles with Eddie Bauer leather interiors, Dell computers with Intel microchips, and Diet Coke with Splenda artificial sweetener. The new product that results from this strategy is referred to as an ingredient branded offering (IBO) and typically contains two parent brands: a host brand, which is the core brand of the new product (e.g. Betty Crocker cake mix), and a branded ingredient, which is a component brand that resides within the host (e.g. Hershey’s chocolate). The host and ingredient are collectively referred to as parent brands.

The presence of multiple parent brands within a single product provides the participating firms with many advantages, including development cost sharing, market access, and equity leveraging (e.g. Keller and Aaker 1992; Norris 1992; Vaidyanathan and Aggarwal 2000). The greatest advantage, however, is brand building. Associating with another brand allows a brand to
build its own equity through a mechanism called *feedback effects*. For this paper, I define feedback as the change in brand evaluation based on intervening information. For instance, if Betty Crocker engaged in an IBO with Splenda and the new product was outstanding, consumers might improve their evaluations of Betty Crocker and Splenda based on this new information. The difference between the updated evaluation and the evaluation prior to the IBO is feedback.

Despite the advantages afforded by the IBO approach, it is not a bullet proof strategy. Many drawbacks exist, including high promotion costs, loss of brand control, consumer confusion, power imbalances, and the sharing of profits (e.g. Norris 1992). More important, however, is the risk of failure of the new product itself. Because approximately 35-45% of all new products fail (Boulding, Morgan, and Staelin 1997), it is important to understand what impact failure has on the parent brands. However, to my knowledge, work on IBO failure is rare (one example is Radighieri et al. 2009). Therefore, failure is the main focus of this work, and I define failure as an unsuccessful market performance (e.g. poor sales).

When products fail, individuals will try to understand why (e.g. Folkes 1984). This is particularly important for the brands in an IBO because neither operates alone. Therefore, it is possible that a search for answers could lead consumers to focus on a particular attribute of one or both of the brands when trying to understand what happened. Within an IBO there are many attributes a consumer could use to evaluate the failure, including equity levels, parent brand type (e.g. host or ingredient), and who initiated the relationship to create the new product. For instance, the equity of the parent brands could lead a consumer to conclude that higher equity brands could not be responsible for the failure because they are well established and perceived as experts. The extant research has examined the impacts of parent brand equity and parent brand
type after an IBO failure (e.g. Radighieri et al. 2009). However, the literature has not addressed the effect of being the brand that initiated the relationship.

It is likely that the brand that began the IBO relationship could significantly impact how the product failure is evaluated. I refer to this brand as the *initiator*. This is the main contribution of this paper: understanding the influence of the initiator in an IBO. An example of an initiator is Pillsbury approaching Hershey about joining together to create dual branded cake mixes. As a result of the status of initiator, individuals might view the IBO as the initiator’s product, which will in turn drive feedback effects. For instance, if the Pillsbury/Hershey IBO discussed above failed, because Pillsbury was the initiator, individuals could use knowledge of Pillsbury to determine feedback effects. This suggests, however, that simply being the initiator is not sufficient. It is likely that other characteristics of the initiator will be considered along with the initiator status. For instance, a high equity initiator might result in less negative feedback than a low equity initiator due to the advantages afforded high equity brands in combating failure (e.g. Hess 2008).

Therefore, it is important to consider other factors in assessing the influence of the initiator on feedback effects. Because brand equity is a key determinant of product success in the marketplace and consumers consider brand equity when evaluating products, I examine its role in an IBO. However, because an IBO contains multiple brands, the use of equity as a basis for evaluations is complicated. Obscuring things further, there is likely an equity gap between the parent brands. An example of a parent brand equity gap is a private label brand using a national brand ingredient in their products (e.g. Vaidyanathan and Aggarwal 2000). This arrangement involves a high equity brand (the national brand) residing within a low equity brand (the private label brand). Although this is an extreme example, this is a very real issue because it is
improbable that the IBO parent brands will have the same brand equity. Therefore, the difference in brand equity of the two parent brands could have an impact on feedback effects. In this study, I focus on the situation in which the brands in an IBO have significantly different equity levels, a term I call \textit{parent brand equity asymmetry}. Having asymmetric parent brands in failure could create some confusion for the consumer, as it might be unclear as to how to evaluate the failure. Therefore, understanding equity issues and how they impact the initiator will assist parent brands of varying levels of equity in understanding how an IBO failure will affect them.

Understanding the influence of the initiator on feedback effects after an IBO failure is the key focus of this paper. Illumination of this issue provides a significant contribution to the literature because invariably one firm has to begin the relationship. Furthermore, exploring the impact of equity on the initiator will provide an additional contribution to the literature and give managers information to help them protect their brands.

In sum, I contribute to the literature by addressing the impacts of product failure, parent brand equity asymmetry, and IBO initiation on the parent brands. Specifically, I answer the following questions: (1) how much impact does the identity of the initiator have on feedback effects after an IBO failure? and (2) is the initiator impact influenced by brand equity? I also address these issues in a success, but failure is my main focus.

The rest of the paper is organized as follows. First I address the concept of the initiator. Then I discuss the notion of feedback effects and explain their role in IBOs. A discussion of hypotheses development concludes the theoretical portion of the paper. The experiment is then described, results are reported, followed by a discussion of the results and theoretical contributions, managerial implications, limitations, and suggestions for future research.
INITIATION

It is possible that the brand that started the IBO could create significantly more feedback for the IBO parent brand pair than the brand that was second to the partnership. Because the initiator actively promotes the alliance, the market will be exposed to more information about the initiator than about the non-initiator. This additional and possibly earlier information could have an impact on feedback effects, yet the literature is relatively silent on this issue. To my knowledge, the only extant research related to initiation is an examination of marketing executives which suggests that an initiator is indelibly tied to his or her product and is damaged by any related criticism about its offering (Tse et al. 1988). In the context of IBOs, this implies that the initiator is also tied to the success of the new product and will be a basis for determining feedback effects. In spite of this logic, it is reasonable to assume that being an initiator is by itself not the only predictor of feedback. Because high equity brands are afforded many advantages not available to low equity brands (e.g. Hoeffler and Keller 2003), it seems possible that higher equity initiators provide more favorable feedback effects than do low equity ones.

Despite the aforementioned studies that examine IBOs, to my knowledge, there is no literature that examines the role of the initiator in this strategy. This is surprising because being an IBO initiator might carry benefits or liabilities that do not exist for its partner brand. Research on this topic is desperately needed due to the complexities involved in the creation of an IBO and the strong strategic implications that accompany the strategy.

An IBO should benefit both parent brands, because any partnership in which one brand benefits and one is harmed will be short lived. Therefore, in planning an IBO, managers desire a strategy that will enhance both firms. Thus, since firms are working together as one, feedback is
viewed as a “we” instead of an “us versus them” configuration. This results in feedback conceptualized as a collective: the net gain or loss of equity for the pair.

Overall, the notion of the initiator is important for both consumers and firms. For consumers, knowledge that a particular brand initiated an IBO that ultimately failed, for example, could impact how the consumer punishes the parent brands (through negative feedback) and will impact their patronage of the brands in the future. Despite its significance to consumers, initiation is also important for firms. By understanding the ramifications of initiation, they will be able to successfully design an IBO configuration that will serve their best interests and protect them from failure.

CONCEPTUAL DEVELOPMENT

The importance of IBOs lies in the presence of transfer effects. In a transfer effect, information (e.g. equity, performance, attitudes, or attributes) about a brand transfers to a linked brand in a positive or negative manner. For instance, when Pillsbury introduces a new brand extension with the Pillsbury name, the impact of the Pillsbury name on the extension results from the connection between the extension product and the Pillsbury name. It is transfer effects that allow brand extensions to be effective. This mechanism allows parent brands to take advantage of existing knowledge of the brand.

There are three different types of transfer effects: forward transfer, which involves information about the parent brands transferring to the IBO, feedback effects (also known as backward transfer), which entails information about the IBO transferring back to the parent brands, and lateral transfer, which involves information about the parent brands transferring to one another. For instance, if Ford creates a vehicle with Eddie Bauer branded leather interior,
information about Ford (e.g. performance) and Eddie Bauer (e.g. luxury) would transfer to the new vehicle via forward transfer effects, information about the new vehicle would transfer back to Ford and Eddie Bauer via feedback effects, and information about Eddie Bauer and Ford would transfer to one another via lateral transfer effects. Overall, the key implication of transfer effects is that information about one parent brand impacts not only the IBO, but also the other involved parent brands. All three types of transfer are important; however, in this paper I focus on feedback.

Feedback effects are important because they impact the parent brands. This is crucial because positive feedback can improve evaluations of the parent brand, which can positively impact its equity. This impact on equity allows firms to grow their brands. For instance, if Nestle and Dole created a successful IBO, it could enhance the Nestle and Dole brands. However, if an IBO is unsuccessful, it could harm both parent brands through negative feedback.

Despite their importance, extant research on IBO feedback effects is relatively limited. Work has shown that attitudes of the IBO impact attitudes of the parent brands in an asymmetric manner, such that less familiar brands receive a larger amount of positive feedback than their more familiar partners (Simonin and Ruth 1998). Other work shows that the order of the brand names in an IBO is important, with the IBO taking on an attribute profile consistent with the brand listed first, which results in stronger feedback (Park, Jun, and Shocker 1996). Additional research has highlighted the impacts of IBO outcome and parent brand equity asymmetry on feedback effects and indicates that lower equity brands earn more positive feedback in a success (Radighieri et al. 2009).

The work on feedback effects has assumed IBO success. However, due to the significant failure rate of new products, it is important to understand the impact of IBO failure because this
negative outcome can generate negative feedback effects that can impact the parent brands. Despite the fact that the new product failure rate is very high, to my knowledge very little research has addressed IBO failure. One example, however, found that the ingredient brand in an IBO receives more negative feedback than the host brand, regardless of parent brand equity asymmetry (e.g. Radighieri et al. 2009). In this paper, I extend this logic into the IBO initiation domain.

As discussed earlier, I conceptualize feedback as the combined feedback to the parent brands due to the collective nature of an IBO. Therefore, feedback herein is the sum of the feedback to both parent brands. For instance, if Pillsbury and Hershey create an IBO that ultimately fails, feedback is comprised of the brand damage to both Pillsbury and Hershey. This is an appropriate treatment because residing together in an IBO leads the parent brands to be associated with one another.

To explain how the initiator could impact these feedback effects, I apply the literature on accessibility-diagnosticity (e.g. Feldman and Lynch 1988; Herr, Kardes, and Kim 1991). The accessibility-diagnosticity model examines the influence of information cues on evaluations and highlights the process that consumers undergo when attempting to sort through competing cues (Feldman and Lynch 1988). In other words, when exposed to multiple cues, the model explains which cues are used to make an evaluation. For instance, when evaluating a product (e.g. sneakers), the accessibility-diagnosticity model explains which cues (e.g. price, color, cushioning) are influential in making the evaluation.

A cue is accessible when it is easily recalled from memory and is diagnostic when it is used as basis for an evaluation (Herr, Kardes, and Kim 1991). The probability of any cue being used for evaluation is higher when it is more easily recalled (high accessibility), other cues are
recalled less easily (lower accessibility), and the information is deemed useful (diagnostic) (Berens, van Riel, and van Bruggen 2005). Increasing the accessibility of a cue increases the probability that that cue becomes diagnostic (Herr, Kardes, and Kim 1991). Therefore, the more accessible the price cue in the Nike example, the greater the probability it will used to evaluate the shoe. This probability increases as the accessibility of the color and cushioning cues decrease.

Research also indicates that consumers only use enough information to reach a minimum diagnosticity threshold, after which point no other information is considered (Lynch, Marmorstein, and Weigold 1988). This indicates that once a cue is deemed sufficient to make an evaluation, information search stops. Continuing the Nike example, if the price cue allows the consumer to reach the diagnosticity threshold, the other cues are not considered. However, the presence of additional cues (e.g. a second parent brand) in an IBO complicates this process.

After an IBO outcome, consumers must sort through numerous cues before assigning feedback. Through the accessibility-diagnosticity conceptualization I predict differing outcomes for success and failure. At its most basic level, it is expected that an IBO success will result in positive feedback and IBO failure will result in negative feedback. This is consistent with prior work on IBO feedback effects (e.g. Radighieri et al. 2009). When an IBO succeeds, positive associations will result, which in turn will positively impact (through positive feedback) the involved parent brands. However, an IBO failure should create negative associations, which should negatively impact (through negative feedback) the parent brands. From this foundation I propose that different cues are used to assign feedback after IBO success and failure. These include the brand equity asymmetry and initiator cues.
**Parent Brand Equity Asymmetry Cue**

Because equity serves as a type of cue (e.g. Broniarczyk and Gershoff 2003), consumers could base their feedback evaluations on the equity asymmetry of the parent brands. Because a brand name is prominently displayed on products, it is naturally highly accessible. However, an IBO is complicated because it has two parent brands. Additionally, the parent brands are likely to have equity asymmetry. Asymmetry is similar to brand dominance, which has been shown to be highly accessible (Berens, van Riel, and van Bruggen 2005). Brand dominance exists when the brand itself dominates communications for a product, whereas brand equity asymmetry exists when one parent brand within the IBO dominates the other on equity. Therefore, when a high equity brand and a low equity brand exist together, it is likely that the two will have different levels of accessibility. Research indicates that high equity brands are generally highly accessible (Aaker 1991). Low equity brands, because they are not well known, are more likely to be less accessible. Following this logic, the higher equity parent brand would be the more accessible cue, which could make it diagnostic and therefore used to assign feedback effects. However, this is not the only cue present in an IBO.

**Initiator Cue**

Another possible determinant of feedback is the identity of the parent brand who initiated the IBO. The parent brand who initiates an IBO could be highly accessible because of its position in the alliance. It is likely that the parent brand that initiates the IBO does so because it sees value in the relationship. Therefore, the initiator is likely to promote the relationship to the marketplace, highlighting the advantages of it, which makes the initiator highly accessible. This should make the initiator brand more accessible than its partner brand. Thus, the initiator could
be the most accessible (and therefore diagnostic) cue. However, based on the literature, I expect different cues to be diagnostic in success versus failure.

**Feedback in Success**

In the presentation of an IBO, both the parent brand equity asymmetry and initiator cues should be highly accessible because both of these cues are promoted. However, based on theory, I expect asymmetry to be the most accessible and diagnostic cue in an IBO success.

Because positive information is relatively routine, it does not lead to the deeper processing that occurs after negative information (Oliver, Robertson, and Mitchell 1993). The routine aspect hinders the motivation to search for more information. This is important because research indicates that motivational intensity influences the diagnosticity threshold (Lynch, Marmorstein, and Weigold 1988). This lack of motivation leads to a lower diagnosticity threshold (Feldman and Lynch 1988). Therefore, I expect that consumers will not require much information to evaluate an IBO success. Since high equity brands are highly accessible (e.g. Aaker 1991), I expect consumers will deem the equity asymmetry information (which includes a high equity brand) sufficient for making an evaluation. This higher accessible information then becomes diagnostic, which in turn determines feedback. Accordingly,

H1: In an IBO success, the parent brand equity asymmetry cue has a significant impact on feedback effects.

**Feedback in Failure**

Prior literature has indicated that diagnosticity can change under certain conditions (e.g. Ahluwalia, Burnkrant, and Unnava 2000). Therefore I expect that in a failure diagnosticity will change, resulting in different feedback effects than in a success.
Research has shown that negative information activates deeper processing (e.g. Oliver, Robertson, and Mitchell 1993). This results in greater search and more detailed evaluations (Mahajan 1992). Therefore, consumers, in the wake of a failure, perform a more thorough evaluation of the situation, and should consider more cues than just the equity asymmetry, because the asymmetry itself is not sufficient to reach the diagnosticity threshold. This indicates that the threshold increases, thus requiring more information to result in an evaluation. This is consistent with prior research that indicates that negativity in information causes it to be viewed as less diagnostic, which results in a longer time to reach the threshold (Feldman and Lynch 1988). Whereas in a success the asymmetry information is adequate to pass the diagnosticity threshold, in a failure it is not. Because the initiator generally will promote the IBO and their association with the partner brand, it seems likely that they will be viewed as the “leader” of the IBO. This is consistent with the strategic alliance literature, which suggests that the initiator plays the lead role in an alliance (Saxton 1997). This should make the initiator diagnostic as a result of the deeper processing.

However, there is other research that suggests that equity still plays a role in a failure, with high equity brands being somewhat shielded from failure under certain conditions (e.g. Darke, Ashworth, and Ritchie 2008). Therefore, through deeper processing, I expect that the initiator and parent brand equity asymmetry cues will both be diagnostic, thus leading to them both influencing negative feedback, such that the impact of the initiator on feedback effects is dependent on its equity level. Because high equity brands are protected to a degree from failure, it follows that the parent brands in a high equity initiated IBO will incur less negative feedback than those in a low equity initiated IBO. Therefore,
H2: In an IBO failure, feedback to the parent brands is determined by both the parent brand equity asymmetry and initiator cues, with a high equity initiator leading to less negative feedback effects than a low equity initiator.

Control Variables

Brand commitment. The prevailing literature shows that when an individual has a positive attitude toward a brand, they will resist negative information about that brand more than positive information (e.g. Edwards and Smith 1996). Further, highly committed consumers will counterargue negative information about the brand more than positive information (Ahluwalia, Burnkrant, and Unnava 2000). Therefore, I include brand commitment in the model to control for its potential impact on the results.

Involvement. Similarly, involvement also could impact the results. Defined as perceived personal relevance (e.g. Zaichkowsky 1985), higher levels of involvement can lead to counterarguments against negative information (Wright 1973) and higher devotion to brand choice (Howard and Sheth 1969). As a result, I also include involvement in the model.

In summary, my overall propositions are that in a success, the equity asymmetry of the parent brands influences feedback effects, but in a failure, a combination of the initiator and parent brand equity asymmetry have a significant influence (see Figure 3.1).
METHODOLOGY

Prior research on ingredient branding has utilized food brands in experimental settings (e.g. Park, Jun, and Shocker 1996). Because cookies typically have prominent ingredients, cookies were chosen as the host parent brand and cranberries were chosen as the ingredient parent brand.

Pretest

In order to test the propositions, I needed to select brand names to use in the experiment. A pretest was conducted ($N = 34$) to choose appropriate brand names. Due to the need for equity
asymmetry, I wanted to choose both high equity and low equity cookie and cranberry brands. A series of seven point items was used to assess various brands on perceived quality. Pillsbury \((M = 5.82, SD = 1.25)\) and Franz \((M = 3.69, SD = 1.45)\) were chosen as the high and low equity host brands, respectively, and Ocean Spray \((M = 5.65, SD = 1.04)\) and Sunsweet \((M = 3.85, SD = 1.00)\) were selected as the high and low equity ingredient brands. In order to enhance external validity, I also needed to ensure that the high equity/low equity IBO combinations were believable. Both the Pillsbury/Sunsweet \((M = 3.51, SD = 1.64)\) and Franz/Ocean Spray \((M = 3.58, SD = 1.92)\) IBOs were relatively more believable than the other alternatives.

To prevent confounding problems I also needed to ensure that the host and ingredient products were not generally associated with each other. For instance, if chocolate chips were used, the close linkages between cookies and chocolate chips could involve associations that are inseparable and might confound evaluations of the brands. The pretest indicated that the association between cookies and cranberries is very low \((M = 1.59, SD = .96)\). Finally, I needed to ensure that the categories used contained products that subjects enjoyed. Results of the pretest confirm this supposition, as both cookies \((M = 6.26, SD = 1.38)\) and cranberries \((M = 5.18, SD = 1.53)\) are well liked.

**Design**

A pair (one for success and one for failure) of 2 (parent brand equity asymmetry type: host larger than ingredient, ingredient larger than host) x 2 (initiator: host initiates, ingredient initiates) between subjects ANCOVAs (controlling for host and ingredient brand commitment and category involvement) were used to evaluate feedback effects. Because brand attitude is a component of brand equity (Aaker 1991; Lane and Jacobson 1995), I conceptualize feedback effects in this study as the change in brand attitude. Subjects were 210 undergraduate students at
a large university in the Northwestern United States. See Figure 3.2 for a graphical representation of the procedures.

**FIGURE 3.2**

**EXPERIMENTAL PROCEDURES**

- **Initial Evaluation of Parent Brands:**
  - Host Brand
  - Ingredient Brand
  - Commitment
  - Category Involvement

- **Presentation of Manipulations**
  - Equity Asymmetry
  - Initiator
  - Outcome

- **Manipulation Checks**

- **Host Feedback AND Ingredient Feedback**

**Initial Parent Brand Attitude Measure**

Subjects were given one host brand and one ingredient brand to evaluate on a nine point attitudes measure (adapted from Wang and Lee 2006, see Appendix C for the items). At this time, the subjects were unaware that the two brands were involved in an IBO. In addition to
evaluating attitudes, subjects also completed scales on commitment to both the host and ingredient brands as well as category involvement. Subjects who ultimately were assigned to the host larger condition evaluated Pillsbury and Sunsweet and those assigned to the ingredient larger condition evaluated Franz and Ocean Spray.

**Equity Asymmetry, Initiator, and Outcome Manipulations**

After the initial parent brand attitude measure, subjects were exposed to three manipulations. These manipulations were presented in the form of a news article from Brandweek, a brand trade publication. The equity asymmetry and initiator manipulations were delivered in the article by informing the reader that one brand contacted (initiator manipulation) another brand (the combination of brands is the equity asymmetry manipulation) to create a new product 18 months ago. In this manipulation, the subjects either viewed the host larger than ingredient (Pillsbury/Sunsweet) or ingredient larger than host (Franz/Ocean Spray) condition. The outcome manipulation was a second paragraph that discussed that the new product was a success or failure (see Appendix D for a sample article and Appendix E for all condition scripts).

**Outcome and Initiator Manipulation Checks**

After the scenario, subjects evaluated whether the new product was a success or failure and also identified the initiator parent brand on nine point scales.

**Subsequent Parent Brand Attitude Measure**

After the manipulation checks, subjects then evaluated the parent brands on the same attitudes measure used during the initial parent brand attitude exercise.

**Equity Asymmetry Manipulation Check**

A manipulation check was also required for equity asymmetry. This check ensures that the host is evaluated more highly than the ingredient in the host larger than ingredient condition.
and vice versa for the ingredient larger than host condition. To perform this check, evaluations on initial ingredient attitude were compared to evaluations on initial host attitude.

**Dependent Variable**

In order to develop a true assessment of feedback effects, the parent brands must be measured both before and after the manipulations. Therefore, as just described, in the experiment subjects evaluated both host and ingredient parent brands attitudes twice. Feedback was calculated by subtracting the attitude measure at time 1 from the attitude measure at time 2 for both the host and ingredient. Because I conceptualize the IBO as a collective strategy in which the success of both parent brands is important in order for the relationship to thrive, the two attitude feedback measures were then averaged to provide one overall feedback figure for the parent brand pair.

**Manipulation Checks**

Checks on the three manipulations were all successful. The IBO was rated significantly more successful in the success condition than in the failure condition ($M_{SUCCESS} = 7.51$, $SD = 1.27$; $M_{FAILURE} = 2.36$, $SD = 1.30$; $t(208) = 28.96$, $p < .001$). The host brand was identified as the initiator more in the host initiates condition than in the ingredient initiates condition ($M_{HOST\ INITIATES} = 7.86$, $SD = 1.35$; $M_{ING\ INITIATES} = 2.99$, $SD = 2.37$, $t(208) = 18.35$, $p < .001$). The equity asymmetry manipulation check indicated that the host was evaluated more highly than the ingredient in the host larger condition ($M_{HOST} = 7.12$, $SD = 1.37$; $M_{ING} = 5.45$, $SD = 1.41$; $t(105) = 11.57$, $p < .001$) and the ingredient was evaluated more highly than the host in the ingredient larger condition ($M_{HOST} = 5.97$, $SD = 1.49$; $M_{ING} = 6.82$, $SD = 1.58$; $t(103) = -4.50$, $p < .001$).
Results

H1 predicted a significant main effect of parent brand equity asymmetry on feedback effects in an IBO success. The results indicate non-significant main effects of parent brand equity asymmetry ($F[1, 90] = 2.45, p > .10$) and initiator ($F[1, 90] = 2.47, p > .10$) and also a non-significant impact of the interaction ($F[1, 90] = .04, p > .10$) on feedback effects, which fails to provide support for H1 (see Figure 3.3). Despite the predictions, parent brand equity asymmetry is not influential in predicting feedback effects in a success.

FIGURE 3.3
FEEDBACK IN SUCCESS
H2 predicted that the impact of the initiator on feedback effects was dependent on the equity level of the initiator in an IBO failure. The data indicate that both asymmetry ($F[1, 102] = 1.21, p > .10$) and the initiator ($F[1,102] = .44, p > .10$) have a non-significant impact on feedback effects. However, the interaction between parent brand equity asymmetry and initiator is significant ($F[1, 104] = 6.86, p = .01$). Specifically, an IBO resulting from a high equity initiator creates less negative feedback effects than does a low equity initiated IBO ($M_{\text{HIGH EQUITY INITIATOR}} = -.14, SD = .72$ vs. $M_{\text{LOW EQUITY INITIATOR}} = -.57, SD = .71$ for the host larger condition and $M_{\text{HIGH EQUITY INITIATOR}} = -.33, SD = .59$ vs. $M_{\text{LOW EQUITY INITIATOR}} = -.68, SD = .65$ for the ingredient larger condition). This result indicates that the impact of the initiator on feedback

**FIGURE 3.4**

**FEEDBACK IN FAILURE**
effects depends on the equity levels of the parent brands, providing support for H2 (see Figure 3.4).

**DISCUSSION**

Overall, the results of this study indicate that the initiator has a significant impact on IBO feedback effects under certain conditions. Specifically, after an IBO failure, the influence of the initiator cue on feedback effects is determined by the equity level of the initiator. This indicates that both the initiator and parent brand equity asymmetry are diagnostic. If the initiator has the higher level of equity, the feedback effects are less negative than if the lower equity parent brand is the initiator. Seemingly, the IBO parent brands are somewhat protected from failure when using a high equity initiator. The high equity of the initiator serves to buffer the parent brands from the failed IBO, which is consistent with prior research (Darke, Ashworth, and Ritchie 2008).

However, in an IBO success, the influence of the initiator is fairly weak. Feedback effects in a success are not necessarily determined by the initiator or by parent brand equity asymmetry. Because successful information is not necessarily unique, consumers do not spend much time considering the cues.

The results of this experiment also shed light on the idea of an IBO containing parent brands of unequal equity. Although not necessarily superior to a high equity/high equity IBO, a high equity/low equity IBO does result in positive feedback effects under certain conditions. This is important because it suggests that a high equity brand can partner with a lower equity brand and both enjoy its advantageous position in terms of power (e.g. negotiate lower costs and dictate more favorable terms) and reap benefits delivered by positive feedback effects.
This work also adds to the literature on accessibility-diagnosticity. The data suggest that when evaluating parent brands after an IBO outcome, differing types of information are more diagnostic under varying circumstances, with the initiator information more diagnostic in a failure than in a success. This effect is tempered by initiator equity, such that both cues are necessary to assign feedback effects. This research also highlights a context in which multiple cues interact with (instead of dominate) each other. In other words, instead of having one dominantly diagnostic cue, two competing cues are diagnostic in the presence of each other.

**Managerial Implications**

The results of this study highlight various implications for brand managers. Being an initiator in an IBO provides significant risks and rewards for the relationship. If the IBO fails, the initiator is going to bear the responsibility of determining feedback to the brands. Specifically, a low equity initiator will result in larger negative feedback (vs. a high equity initiator) if the IBO fails, but will not necessarily impact feedback if the IBO is a success. Therefore, since an IBO is a particularly risky venture, managers need to be extremely careful about ensuring product success, especially if playing the role of the initiator. By doing this, an initiating firm can reduce risks for both IBO brands and ensure that the partnership will continue. More specifically, a high equity initiator can reduce the negative impacts associated with failure and enhance positive feedback in a success.

For a low equity brand, initiating an IBO can be particularly risky. If the IBO fails, the penalty is far worse than if the high equity brand initiates. Therefore, low equity brands need to be very careful if they intend to be the initiator, because failure can be particularly devastating to both brands.
The results reported in this study also highlight the importance of public relations and advertising. In reality it is largely unknown to the public as to who the initiator of an IBO is. However, efforts by the brands to establish awareness of its role in the IBO can prove beneficial, as the brands are exposed to the negative effects of a failed IBO. Therefore, it is crucial to advertise high equity initiators to limit the damaging impact of negative feedback. However, when the initiator is lower in equity, both brands would gain from information about initiation not being promoted to the public, as it would amplify the negative feedback effects of a failure.

**Limitations and Future Research**

This study is to my knowledge the first to begin to uncover the dynamics of an IBO in relation to initiation. The products in the experiment were low involvement, low commitment, high fit, and inexpensive products. These issues were controlled in order to test the simple effects of initiation on feedback effects. However, future work should focus on discovering the boundary conditions of initiation. Varying the levels of involvement, commitment, fit, and price could create interesting outcomes not captured in this study. Category effects might have a significant impact on initiation. For instance, a high involvement category such as consumer electronics could create effects that are not found in simple food products. Information related to the failure might also create unique dynamics. This study used a third party media source to communicate the failure manipulation. However, word of mouth, corporate communications, and other types could also have differing impacts. In this study I used a combination of failure types (market performance and taste tests). Future work should compare the difference in these two types of failures; it is likely that the taste test manipulation would have stronger effects than the market performance manipulation.
REFERENCES


CHAPTER 4

STRENGTH IN NUMBERS: THE ROLE OF SYNERGY IN INGREDIENT BRANDING

FEEDBACK EFFECTS

INTRODUCTION

In an increasingly competitive marketplace, firms must be creative in order to capture market attention and ultimately market share. A marketing strategy that is utilized to satisfy these needs is the brand alliance (e.g. Park, Jun, and Shocker 1996; Rao, Qu, and Ruckert 1999; Rao and Ruckert 1994; Simonin and Ruth 1998; Venkatesh and Mahajan 1997). A brand alliance involves two or more firms working together in the co-promotion of their brands. This growing strategy provides firms another tool to help them compete in the market.

One special case of brand alliance, ingredient branding, involves a branded component contained within another brand, termed an ingredient branded offering (hereafter referred to as an IBO). An IBO consists of two parent brands: a host (e.g. Dell computers) and at least one branded ingredient (e.g. Intel microchips). This is different from a brand extension, which consists of only one parent brand. Advantages afforded by an IBO include shared costs and associations, equity leveraging, resource access, and shared risk. Overall, however, the greatest advantage of an IBO is brand building.

The literature has addressed brand building through brand extensions. Defined as “the use of a brand name established in one product class to enter another product class” (Aaker 1991, p. 208), brand extensions are a key strategy for firm growth. The brand extension allows a firm to capitalize on the established equity of their brand(s). Because brands are used to help recall
important information (Janiszewski and Van Osselaer 2000), using an established brand name allows firms to provide instant recognition, familiarity, and knowledge to new products (Aaker and Keller 1990). The presence of the brand name on the extension allows consumers to associate it with the core brand. In turn, brand extensions enhance the core brand by reinforcing its image, thus building the brand (Aaker 1991). Work on brand extensions indicates that this strategy is effective in building the brand by positively influencing brand attitudes (Lane and Jacobson 1997), brand associations (Balachander and Ghose 2003), and brand choice (Swaminathan, Fox, and Reddy 2001).

However, IBOs offer another potentially attractive avenue for brand building. Through the same process for brand extensions, firms can build their brands through an IBO. The key difference, however, is that in an IBO a second brand helps contribute to the enhancement of the core brand. This strategy is particularly attractive because a core brand is able to capitalize on the positive associations of a partner brand in addition to their own associations. The literature on brand building using this strategy finds that an IBO can be used to enhance brand attitudes (Simonin and Ruth 1998); it also can help expand a category or enter a new one (Desai and Keller 2002).

Given that IBOs are potentially powerful in building brands, I investigate the differences between this strategy and brand extensions in the ability to help a firm achieve this goal. Specifically, I empirically assess the impact that each type of strategy has on the parent brands. I draw on the notion of feedback effects, the influence on parent brand evaluation that transmits back from the IBO or extension, to investigate how IBOs and brand extensions differ in their impact on parent brand building. Notably, I explore these impacts both in product success and failure. Examining this argument is a critical contribution to the literature. An understanding of
the differences between an IBO and a brand extension can help a firm decide which strategy is appropriate for their needs. By knowing the impacts of each, managers can more effectively design a strategy that will meet their needs. My work provides information managers need to understand how IBOs and brand extensions impact their parent brands. This information can help managers choose partners, manage relationships, and build their brands.

Another key contribution of this paper is the examination of product failure. The extant literature on brand extension and IBO failure is very limited. This is surprising due to the fact that the failure rate of new products roughly 35-45% (Boulding, Morgan, and Staelin 1997). My work provides information to help managers understand what happens to brands after IBO failure. Consistent with the notion that IBOs and brand extensions are unique, I suggest that IBO parent brands receive a degree of protection from a failure that is different than that for brand extension parent brands.

My third and final contribution to the literature is in the area of fit. Extensive research has indicated the advantages of fit between a parent brand and extension (Aaker and Keller 1990; Keller and Aaker 1992; Volckner and Sattler 2006). However, research has scarcely explored the dynamics of fit between parent brands in an IBO (for an exception, see Simonin and Ruth 1998). I extend work on IBO fit and highlight the role it plays in brand building.

The rest of the paper is organized as follows. First, I introduce the mechanism that allows IBOs and brand extensions to grow their parent brands, followed by a literature review, theory development, and predictions. Then I present an empirical study that tests my propositions, followed by a discussion of findings, implications, limitations, and suggestions for future research.
CONCEPTUAL DEVELOPMENT

Forward Transfer

The ability of IBOs and brand extensions to build brands is possible through a mechanism called transfer effects. Defined as the transmitting of information from one brand to another, transfer effects serve as a vector that allows products or brands to become connected. For example, when Nike created Nike golf clubs, the Nike brand and the clubs themselves became connected through this transfer mechanism. The types of information transmitted through transfer can include items such as equity, attitudes, perceptions, and affect. Research in brand extensions has primarily focused on forward transfer: transfer from the parent brand to the extension. For instance, a high equity brand such as Nike can leverage its reputation by creating new products with their brand name. Information and associations about Nike will transfer to the new product, with Nike serving as the parent brand. In effect, the product will generally perform better with the Nike name than without it. The dynamics of forward transfer are well established in both the brand extension (Aaker and Keller 1990; Boush and Loken 1991; Broniarczyk and Alba 1994; Park, Milberg, and Lawson 1991) and IBO literature (Park, Jun, and Shocker 1996; Simonin and Ruth 1998). However, another type of transfer effect works in the opposite direction.

Feedback Effects

This other type of transfer, which is the focus of this work, is a feedback effect. Feedback effects involve knowledge of the new product transferring back to the parent brand. Continuing the Nike example, a Nike brand extension generates its own associations and evaluations, and this knowledge thus impacts the Nike core brand. Research on brand extension feedback effects (also called reciprocal effects) indicates that an extension can create positive (e.g. Dillon et al.)
2001; Morrin 1999) or negative (e.g. Loken and John 1993) feedback under certain conditions. Work on IBO feedback effects is less common and indicates that characteristics of the IBO can create both positive (Park, Jun, and Shocker 1996; Radighieri et al. 2009; Simonin and Ruth 1998) and negative (Radighieri et al. 2009) feedback effects.

Feedback effects are the driving forces behind the brand building benefits of both brand extensions and IBOs. By linking a brand to a product, firms are able to leverage positive associations in order to ultimately enhance their brands through favorable market response. Because of their importance in brand building, I focus on this type of transfer. Specifically, I examine the contrast between feedback effects in brand extensions and IBOs.

Feedback effects in brand extensions reflect the influence of the extension on the parent brand. Specifically, evaluations of the extension impact the parent brand itself. The association between the extension and the parent brand creates this link. Therefore, any aspect of the extension can have an influence on the parent brand. The value of brand extension feedback can be represented as $V_H$ from a host based extension (e.g. Nike MP3 running shoe) and $V_I$ from an ingredient based extension (e.g. iPod MP3 running shoe).

(1) \[ \text{Brand Extension Feedback} = V_H \text{ or } V_I \]

Feedback effects in an IBO follow the same logic, but with one key difference: the feedback effects are allocated to two parent brands instead of one (Simonin and Ruth 1998). For instance, if Nike is engaged in an IBO (e.g. Nike running shoes with iPod MP3 technology), information about this product could impact evaluations of both Nike and iPod. Therefore, IBO feedback effects can be indicated by the equation below. Extending the notation from equation 1, feedback from the IBO is expressed as an average of the feedback to the host and ingredient.
brands. An average of the feedback effects is necessary to make IBO feedback comparable to brand extension feedback.

(2) \[ \text{IBO Feedback} = \text{AVG} (V_H + V_I) \]

Prior research has indicated that combining brand names creates a configuration in which the “sum is greater than the parts” (Rao and Ruekert 1994). This suggests that the presence of a second brand creates synergy between IBO parent brands. The concept of synergy occurs when “the value of a set of elements in combination exceeds the sum of the values that the elements would have if they occurred in isolation” (Shine, Park, and Wyer Jr. 2007, p. 663). Research on synergy has established that two complementary brand extensions are evaluated more highly than independent brand extensions (Shine, Park, and Wyer Jr. 2007). This suggests that synergy results in improved evaluations for products (via forward transfer) when multiple brands are present. Other research shows that forward transfer and feedback effects are positively related, wherein positive forward transfer results in positive feedback (Simonin and Ruth 1998). Following this logic, if (1) synergy favorably impacts forward transfer and (2) positive forward transfer leads to positive feedback, then synergy should also lead to positive feedback.

Based on this, if synergy holds, then the average value of host and ingredient feedback effects in an IBO should be larger than the average of the feedback effects from the two brand extensions. Combining equations 1 and 2 requires additional notation. I denote feedback to the two IBO parent brands as \( V_{\text{IBO-H}} \) for feedback to the IBO host and \( V_{\text{IBO-I}} \) to the IBO ingredient, and feedback to the two respective brand extensions as \( V_{\text{BE-H}} \) for the host based extension and \( V_{\text{BE-I}} \) for the ingredient based extension. For synergy to be present, the following equation must hold:
Feedback Synergy = AVG (V_{IBO-H} + V_{IBO-I}) - AVG (V_{BE-H} + V_{BE-I}) > 0^{1}

This is the key contribution of this work: examining the role of synergy in IBO feedback effects. In my framework, I conceptualize synergy as the combinative change in parent brand evaluations as a result of residing an IBO. Synergy suggests that an IBO might be a better brand building strategy than a brand extension.

To my knowledge, limited research exists that empirically explores this notion. One work finds mixed results: IBO feedback effects on certain specific attributes were more favorable than corresponding brand extension feedback effects, yet other attributes were not (Park, Jun, and Shocker 1996). Other research has shown that adding a second brand to an offering (in the form of a brand alliance) can signal perceived quality under certain conditions (Rao, Qu, and Ruekert 1999). Despite these works, the issue of whether an IBO is a better brand building strategy is still largely unresolved. Therefore, this paper contributes to the literature by further addressing this topic. Specifically, I draw on the notion of synergy to show that the existence of two brands in an IBO results in a brand building dynamic that differs in highly meaningful ways from that of traditional brand extension. The next section highlights the theory used to form my hypotheses.

**Context Effects**

I use the literature on context effects to form my theoretical arguments regarding feedback effects in IBOs and brand extensions. Context effects are the “perceptual or evaluative characteristics of material in close proximity” to an object (Simonin and Ruth 1998, p. 32). Prior research has shown that judgments are context sensitive (Herr 1989; Meyers-Levy 1989), such that the evaluation of a stimulus is dependent upon the context in which it is viewed. This

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^{1} This equation was adapted from Shine, Park, and Wyer Jr. (2007)
dependence is related to accessibility and diagnosticity. The information from the new context can change what cue is viewed as diagnostic and what interpretation is accessible (Feldman and Lynch 1988). A cue is accessible when it is easily recalled from memory and is diagnostic when it is used as basis for an evaluation (Herr, Kardes, and Kim 1991). Increasing the accessibility of a cue increases the probability that that cue becomes diagnostic (Herr, Kardes, and Kim 1991). In other words, the relevance of a cue changes as it becomes more accessible. The changing of cue relevance is a result of contextual influences activating constructive processing (Wilson and Hodges 1992). This notion is key to my arguments, as I conceptualize the presence of a second brand in an IBO to be a particular context that is not found with a brand extension, and this context changes the relevance of cues.

Specifically, the presence of the second brand stimulates constructive processing that leads to differential evaluation of the parent brands that does not occur in a brand extension because the extension does not possess a second parent brand. Consumers have an existing knowledge of brands, including information on attributes, features, and price (Buchanan, Simmons, and Bickart 1999), and the information that is used for judgment is dependent on the context in which it is presented. This context specific information ultimately impacts feedback effects.

Therefore, the nature of feedback effects has its grounding in context effects. Research has indicated that contextual factors can impact consumer evaluations. Specifically, changes in brand evaluations can result from the introduction of brand extensions (Loken and John 1993; Milberg, Park, and McCarthy 1997). The knowledge of the brand extension (a specific context) alters what consumers think about the parent brand. The parent brand would therefore not be affected without the extension knowledge. This is also consistent with prior work on brand
alliances, which has found that the brand alliance itself will make information about one brand relevant for evaluation of the other (Levin and Levin 2000), thus altering evaluations and creating feedback effects.

Following this logic, a brand should be evaluated differently if it is part of an IBO than if it is not. This indicates that an IBO related brand, due to its association with another brand, could make information accessible that would not be activated in a brand extension. Information about an IBO should link the two parent brands together and thus change evaluations of those brands. It then follows that exposure to two brands in proximity can lead to enhanced evaluations, which is consistent with the extant literature (Rao, Qu, and Ruekert 1999; Shine, Park, and Wyer Jr. 2007). In other words, consistent with work on brand synergy, the context may lead consumers to reflect on benefits that would not be considered if the products were not presented together, which should make certain attributes accessible. This is a significant advantage for an IBO, because by definition an IBO contains at least two brands.

As a result, due to the salience of the brands in close proximity, evaluations could be enhanced. Knowledge of one brand will map from each parent brand to the other, thus creating an additive effect. For example, Nike and iPod residing within the same product could create stronger evaluations than Nike or iPod could generate alone. Associations of Nike would map to iPod and associations of iPod would map to Nike. This synergistic phenomenon has been shown to exist under certain conditions (e.g. Shine, Park, and Wyer Jr. 2007). Overall, because of the presence of a second parent brand, a “strength in numbers” effect might emerge, such that the feedback effects to IBO parent brands are greater than the feedback effects to corresponding brand extension parent brands, consistent with the synergy equation outlined in previous discussions.
Arguably, the presence of either one parent brand for extensions or two parent brands for IBOs increase the chances of success in the marketplace. Even in these cases, the reality is that new products fail. Thus, to fully understand the implications of feedback effects in brand extension as contrasted with IBO feedbacks, I consider situations of both success and failure. Understanding feedback effects is important after a product success because it indicates how the brand is enhanced. Feedback effects after a failure are important to understand because of the possible negative ramifications they can have on the brand and firm. Below I address the concept of outcome, contrast success and failure, and examine the influence of outcome on feedback effects.

**Outcome**

*Success.* Association with a successful product leads to parent brands being rewarded for their involvement with the product. The literature on brand extensions has indicated that successful extensions lead to positive feedback effects (e.g. Balachander and Ghose 2003; Dillon et al. 2001; Morrin 1999; Swaminathan, Fox, and Reddy 2001). This effect has also been found in IBOs (e.g. Radighieri et al. 2009). By being a part of a successful product, a brand is enhanced, regardless of whether the product is a brand extension or IBO. However, positive feedback to the parent brands are not necessarily the same for brand extensions and IBOs due to the number brands involved in each strategy.

As discussed, research has suggested that synergy is present in a brand alliance (e.g. Rao and Ruekert 1994), such that the perceived quality of a brand is more favorable when involved in an alliance with another brand than when acting alone (e.g. Rao, Qu, and Ruekert 1999). Thus, a parent brand receives a feedback “boost” when involved with another brand. This synergy effect is not applicable to brand extensions, however, because they do not possess multiple parent
brands. This implies that an IBO has an advantage over a brand extension. Specifically, a successful IBO could create positive feedback effects that are superior to the positive feedback provided by a successful brand extension.

Therefore, I expect success to lead to positive feedback effects to both IBO and brand extension parent brands. However, because of synergy, I also posit that these positive feedback effects will be larger for IBO parent brands than for brand extension parent brands. Thus, the presence of two parent brands creates a “sum is greater than the parts” effect which benefits IBO parent brands but not brand extension ones. Accordingly,

H1: In a success, positive feedback to the IBO parent brands will be stronger than to brand extension parent brands.

Failure. Because a significant number of new products fail, it is also important to understand IBO and brand extension feedback effects after a product failure. The extant literature indicates that failed brand extensions can harm parent brands (e.g. Milberg, Park, and McCarthy 1997). This negative impact is also present with failed IBOs (e.g. Radighieri et al. 2009). Thus, association with a failed product results in negative feedback effects regardless of the product type (brand extension or IBO). However, as with H1, the feedback effects might not be the same for IBO and brand extension parent brands.

Using the logic of H1, it follows that the greater perceived quality provided by synergy should give IBO parent brands a degree of protection from a failure. Because a brand extension parent brand does not have the advantage of a partner, it should be more exposed to the negative impacts of a failure. The protection for the IBO parent brands comes from synergy and not the simple fact that there are two brands to share the negative feedback.
The enhancement resulting from a second parent brand should positively impact the involved parent brands. Overall this indicates that IBO parent brands should have higher perceived quality than brand extension parent brands. Research suggests that under certain conditions, higher equity brands have a degree of protection from the harmful effects of failure (e.g. Hess 2008). Therefore, the synergistic effect of an IBO should enhance the parent brands, and this enhancement provides built in protection from a failure.

Therefore, due to synergy, IBO parent brands should receive an increased level of perceived quality, which in turn provides a level of protection from failure. This benefit is not available to brand extension parent brands because they do not possess a second parent brand and the accompanying synergistic advantages. Therefore,

H2: In a failure, negative feedback to the IBO parent brands will be weaker than to brand extension parent brands.

**IBO Fit**

Another important concept that I examine in this work is fit. Prior work has established the importance of this notion. Traditionally, research on fit has been limited to brand extension fit. Specifically, researchers have determined that fit between the parent brand category and extension category is crucial for the success of brand extensions (Aaker and Keller 1990). In IBOs, there is another type of fit that focuses on fit between the parent brands. This type of fit, which I call IBO fit, is relatively scarce in the literature.

For my purposes, I adopt the conceptualization of Simonin and Ruth (1998) and define IBO fit as the degree of perceived cohesiveness between the two parent brands in an IBO. The key difference between extension fit and IBO fit is that the former involves the relationship between the parent brand and the extension product and the latter concerns the relationship
between two parent brands. In simpler terms, extension fit is the degree to which it makes sense for the parent brand to create the extension product and IBO fit is the degree to which it makes sense for the two parent brands to work together.

Research has indicated that IBO fit is positively related to feedback effects (e.g. Simonin and Ruth 1998). In other words, the greater the degree of perceived cohesiveness between the IBO parent brands, the greater the resulting feedback effects. If it “makes sense” for the two brands to join together, it will result in better feedback; if it does not make sense, then poorer feedback results. However, for IBO parent brands, it appears that fit competes with synergy.

The extant literature indicates that brand synergy results in more favorable evaluations for a product that is in the presence of a complementary product versus a product that is presented alone (Shine, Park, and Wyer Jr. 2007). This research also shows that this mechanism operates independently of fit between the two products. In other words, two brands presented together are evaluated more highly, regardless of the degree of fit between the two, when compared to a brand presented alone. This suggests that synergy (the “sum is greater than the parts” effect) to some degree negates the influence of fit (perceived cohesiveness between parent brands). This also suggests that an IBO is afforded the advantage of the ability to have poor IBO fit and still be evaluated more highly than a brand extension.

Therefore, I extend the notion of synergy to the IBO context and predict that it creates more favorable feedback to IBO parent brands (vs. brand extension parent brands) regardless of IBO fit. Extending the logic of IBO outcome (H1 and H2), I also expect that the synergy advantages over fit will hold for both IBO success and failure. The predicted end result for IBO parent brands is more positive feedback in a success and less negative feedback in a failure, regardless of IBO fit level.
H3: IBO parent brands receive more favorable feedback than brand extension parent brands regardless of fit or outcome.

Overall, I use the notion of synergy to examine my contentions that (1) parent brand feedback effects are more positive in IBO success and less negative in IBO failure, and (2) parent brand fit has a lesser impact in an IBO than in a brand extension. See Figure 4.1 for the predicted model.

FIGURE 4.1
MODEL

```
Product Type
  IBO
  Brand Extension

Feedback Effects
  Post-IBO
  Post Brand Extension

Outcome
  Success
  Failure

H1, H2

H3

IBO Fit
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METHODOLOGY

Pretest

In order to assess IBO evaluations, it was first necessary to select suitable parent brands and a corresponding IBO. A pretest was developed to assess familiarity (Simonin and Ruth 1998), IBO fit (adapted from Aaker and Keller 1990), IBO believability (adapted from Beltramini 1982), essentialness of the ingredient to the host category, and parent brand complementarity (Samu, Krishnan, and Smith 1999), all on nine point scales. Twenty nine students evaluated 10 brands on these various measures. The focal products were chosen from a broad array of categories, including food, apparel, and telecommunications. As a result of this exercise, Nokia and Canon were chosen as the host and ingredient, respectively, due to high familiarity ($M_{NOKIA} = 8.39, SD = .92; M_{CANON} = 8.41, SD = 1.08$). This brand pair also exhibited other favorable attributes, including a high degree of IBO fit ($M = 7.64, SD = 1.31$), high IBO believability ($M = 7.87, SD = 1.46$), moderate essentialness of the ingredient to the host category ($M = 5.97, SD = 2.64$) and moderate parent brand complementarity ($M = 5.31, SD = 2.52$).

Moderate levels of essentialness and complementarity are favorable because a high essentialness brand pair will result in difficulty to mentally separate the two products (e.g. chocolate chips and cookies) and a high complementarity brand pair would reduce variance on the measured variable.

The selection of Nokia and Canon resulted in a Nokia camera phone with Canon camera technology IBO, and Nokia camera phone and Canon camera phone brand extensions.

Design

This study tests the impact of both product outcome and IBO fit on feedback effects. In other words, this study examines the impact of product success or failure on feedback effects to the parent brands and the role played by fit. My contentions are that (1) feedback after a success
is more positive for a parent brand in an IBO than in a brand extension, (2) feedback after a failure is less negative for an IBO parent than a brand extension parent, and (3) these results hold even for low fit IBOs.

To test my first two propositions, a 2 (product type: IBO, brand extension) x 2 (outcome: product success, product failure) between subjects ANCOVA was performed to illustrate that feedback effects to parent brands in an IBO are more favorable in a failure and less damaging after a failure when compared to brand extension parent brands. Perceived brand differences was added to the model as a covariate. Two hundred thirty eight students at a Northwestern university participated in exchange for course credit.

Procedure

The experiment was performed under the guise of a brand consultant seeking evaluations

FIGURE 4.2

EXPERIMENTAL PROCEDURES
of brands for their clients. See Figure 4.2 for a graphical representation of the procedures.

**Initial Perceived Quality Measure**

In order to measure feedback effects, equity measures must be collected twice: once before the manipulation and once after. The difference in the two is feedback. The assessment of initial brand equity was performed approximately two weeks before the outcome manipulation and IBO/brand extension brand equity assessment. Subjects were presented ten different brands (five hosts and five ingredients) to evaluate on perceived quality. For all scale items, please see Appendix F. Although the product type manipulation involved a maximum of two brands (two for an IBO and one for a brand extension), ten brands were evaluated initially to hide the purpose of the later portion of the study (manipulation and subsequent equity evaluation). Included among the ten brands were the two brands that could show up in the product type manipulation.

During this time period, subjects also filled out scales on various covariates, including the ability to perceive brand differences.

**Product type manipulation**

After a two week gap, subjects were exposed to the rest of the scenario. First, they viewed the *product type* manipulation, which consisted of three conditions: IBO, host based brand extension, and ingredient based brand extension. In the IBO condition, subjects were given a scenario that indicated that a Nokia camera phone was introduced that consisted of Canon camera technology. In either brand extension condition, subjects viewed a scenario identical to the IBO condition, but without the presence of a second brand (e.g. Nokia camera phone or Canon camera phone).
Fit measure

After viewing the new product description, subjects in the IBO condition then evaluated the fit of the new product, or the degree to which it makes sense for the two parent brands to work together. The brand extension conditions did not make this evaluation because a brand extension involves only one brand.

Outcome manipulation

The second manipulation was outcome. This manipulation consisted of a description of the new product (IBO or brand extension) being a success or a failure (see the Appendix G for all scenarios).

Manipulation check

After the scenario, subjects evaluated whether the new product was a success or failure.

Subsequent perceived quality measure

After the manipulation check, subjects then evaluated a parent brand on the same perceived quality measure used during the initial parent brand evaluation exercise. Subjects in the IBO condition evaluated either Nokia or Canon, but not both; subjects in either brand extension condition evaluated the parent brand corresponding to the extension (Nokia for the Nokia extension condition or Canon for the Canon extension condition).

Dependent variable

Consistent with my conceptualization, the dependent variable, feedback, was determined by subtracting initial parent brand perceived quality from subsequent parent brand perceived quality. Evaluations of the host and evaluations of the ingredient were combined into the variable parent brand feedback (however, post hoc analysis examines the differences between host and
ingredient feedback). Positive values indicate positive feedback and negative values indicate negative feedback.

**Brand differences covariate**

A covariate was also collected to further understand the nature of feedback effects in IBOs and brand extensions. This covariate is the ability to see differences between brands. People expect brands to be different, and this gives each a unique set of associations (Buchanan, Simmons, and Bickart 1999). These associations allow each brand to differentiate itself from others. For individuals who cannot see the differences between brands, however, differentiation is negated. In the IBO context, if there are no perceived differences between brands, then the consumer is unable to see what each adds to an IBO. The result is that perceived synergy is lessened, which likely reduces or eliminates the synergy that brands experience when pairing together in an IBO. Therefore, if an individual cannot tell the difference between the brands in an IBO, it is possible that synergy will be lessened to the point that the IBO feedback effects are no longer more favorable than brand extension feedbacks after a failure. Therefore, I expect that perceived brand differences will have a significant impact on feedback, such that the smaller the perceived difference between the IBO parent brands, the lesser the synergy, which should lower positive feedback after a success and increase negative feedback after a failure.

**Results**

Manipulation checks on outcome indicate that the new product performance was more successful in a success than in a failure ($M_{\text{SUCCESS}} = 7.53, SD = 1.63; M_{\text{FAILURE}} = 1.77, SD = 1.31; t(236) = -30.01, p < .001$) and feedback effects were more favorable in a success than in a failure ($M_{\text{SUCCESS}} = .28, SD = .81; M_{\text{FAILURE}} = -.29, SD = 1.09, t(236) = -4.61, p < .001$).
As mentioned, a 2 (product type: IBO, brand extension) x 2 (outcome: product success, product failure) between subjects ANCOVA was performed on feedback effects, with perceived brand differences included as a covariate. The impact of outcome on feedback is significant ($F[1, 233] = 24.35, p < .001$). The impact of product type is also significant ($F[1, 233] = 5.66, p < .05$), indicating that IBO feedback is more favorable than brand extension feedback ($M_{IBO} = .10, SD = .87$ vs. $M_{BE} = -.11, SD = 1.12$). This result, shown in Figure 4.3, provides initial evidence of synergy in IBOs.

![Figure 4.3: Synergy in Feedback Effects](image-url)

* Individual parent brand means do not average to overall means reported in the ANCOVA due to rounding error. However, for consistency, ANCOVA overall means are reported here.
The product type x outcome interaction was marginally significant ($F[1, 233] = 3.40, p = .07$). Finer grained analyses indicate that the impact of product type on feedback is not significant in success ($F[1, 117] = .04, p > .10$) but significant in failure ($F[1, 115] = 7.11, p < .01$), thus failing to support H1 and providing support for H2 (see Figure 4.4).

The perceived brand differences covariate was significant ($p < .05$), indicating that the ability to detect differences between brands has an impact on feedback effects. This effect also emerges only in the failure condition. A simple linear regression model indicates a positive relationship between the ability to detect brand differences and feedback effects ($\beta = .085, F[1, 237] = 3.58, p = .06$). This effect emerges in a failure ($p < .05$) but not in a success ($p > .10$).

Interestingly, however, the impact of product type on feedback effects is significant for the ingredient parent brand, but not the host parent brand for both the success and failure conditions.
conditions (see Table 4.1 for all pairwise relationships) indicating that product type predicts ingredient feedback but not host feedback. This result was not predicted; however it is addressed in the discussion.

**TABLE 4.1**

**IMPACT OF PRODUCT TYPE ON FEEDBACK EFFECTS**

<table>
<thead>
<tr>
<th></th>
<th>Success</th>
<th></th>
<th>Failure</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Host</td>
<td>Ingredient</td>
<td>Overall</td>
</tr>
<tr>
<td>IBO</td>
<td>0.29</td>
<td>0.40</td>
<td>0.18</td>
<td>-0.06</td>
</tr>
<tr>
<td>Brand</td>
<td>0.28</td>
<td>0.25</td>
<td>0.31</td>
<td>-0.58</td>
</tr>
<tr>
<td>Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t-value</td>
<td>0.13</td>
<td>0.71</td>
<td>-0.6</td>
<td>2.64*</td>
</tr>
</tbody>
</table>

* significant at $p < .01$

H3 predicted that an IBO can suffer from low fit still provide more favorable feedback effects than a brand extension. IBO fit was assessed using a three item, nine point measure (see Appendix F for items). High vs. low fit was developed via a median split on the IBO fit measure. Subjects in the IBO condition were divided into two groups based on their score on IBO fit. These two groups were then compared to the brand extension condition. To test the contentions of the impact of fit, a 3 (fit type: brand extension, low fit IBO, high fit IBO) x 2 (outcome: success, failure) repeated measures ANCOVA (again controlling for perceived brand differences) was performed, with feedback measured in the same manner as in H1 and H2. Both fit type ($F[1, 231] = 3.60, p < .05$) and outcome ($F[1, 231] = 16.37, p < .001$) had a significant effect on feedback effects. The fit type x outcome interaction was not significant ($F[1, 231] = 1.83, p > .10$). The impact of perceived brand differences was marginally significant ($F[1, 231] =
3.56, \( p = .06 \)). Overall, a high fit IBO parent brand receives more favorable feedback than a brand extension parent brand (\( M_{\text{HIGH FIT IBO}} = .24, SD = .86; M_{\text{EXTENSION}} = -.11, SD = 1.12 \), \( t(173) = -2.11, p < .05 \)), but a low fit IBO receives similar feedback to a brand extension (\( M_{\text{LOW FIT IBO}} = -.02, SD = .87; M_{\text{EXTENSION}} = -.11, SD = 1.12, t(176) = -.56, p > .10 \)), which provides only partial support for H3. The results emerge in the failure condition only (see Figure 4.5). As with H1 and H2, the predicted effects occur for the ingredient but not the host (for a summary of all pairwise relationships, see Table 4.2).

**Discussion**

The results of this study indicate partial support for my contentions that the parent brands of an IBO are in a more advantageous position when compared to the parent brands of a brand
extension. After a new product success, IBO parent brands receive virtually the same feedback effects as brand extension parent brands. This is counter to my proposition that the IBO parent brands would be rewarded significantly more than brand extension parent brands. A possible explanation for this finding is addressed in the overall discussion.

**TABLE 4.2**

**IMPACT OF IBO FIT ON FEEDBACK EFFECTS**

<table>
<thead>
<tr>
<th></th>
<th>Success</th>
<th></th>
<th></th>
<th>Failure</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Host</td>
<td>Ingredient</td>
<td>Overall</td>
<td>Host</td>
<td>Ingredient</td>
</tr>
<tr>
<td>High Fit IBO</td>
<td>0.42</td>
<td>0.43</td>
<td>0.36</td>
<td>0.06</td>
<td>-0.20</td>
<td>0.38</td>
</tr>
<tr>
<td>Low Fit IBO</td>
<td>0.16</td>
<td>0.33</td>
<td>0.05</td>
<td>-0.16</td>
<td>-0.20</td>
<td>-0.12</td>
</tr>
<tr>
<td>Brand Extension</td>
<td>0.28</td>
<td>0.25</td>
<td>0.31</td>
<td>-0.58</td>
<td>-0.48</td>
<td>-0.71</td>
</tr>
<tr>
<td>t-value&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.75</td>
<td>-.75</td>
<td>-.18</td>
<td>-2.51*</td>
<td>-.78</td>
<td>-3.14**</td>
</tr>
<tr>
<td>t-value&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.61</td>
<td>-0.27</td>
<td>0.95</td>
<td>1.76**</td>
<td>-0.76</td>
<td>1.83*</td>
</tr>
</tbody>
</table>

<sup>a</sup>: High Fit IBO vs. Brand Extension

<sup>b</sup>: Low Fit IBO vs. Brand Extension

* significant at p < .01

** significant at p < .10

brands would be rewarded significantly more than brand extension parent brands. A possible explanation for this finding is addressed in the overall discussion.

Despite no significant feedback advantage for IBO parent brands in a success, they are indeed protected from a product failure. The presence of the second brand provides a shielding effect, which is consistent with my propositions. This provides evidence of a “strength in numbers” configuration, where the presence of the second brand provides some feedback protection that a parent brand would not have if creating the new product on their own.
Specifically, the results indicate that an IBO parent brand is only mildly harmed by a failure, yet a brand extension parent brand receives significantly more feedback damage.

The data also provide evidence of favorable feedback effects to low fit IBO parent brands compared to brand extension parent brands, under certain conditions. Overall, there is a significant difference in feedback effects between high fit IBO parent brands and brand extension parent brands. The difference between low fit IBO parent brands and brand extension parent brands is marginal, but in the expected direction. In a success, there is no difference between low fit IBO and brand extension parent brands. However, in a failure, the low fit IBO parent brands receive significantly more favorable feedback than the corresponding brand extension parent brands. This provides evidence that the parent brands in an IBO are relatively shielded from the harmful effects of a new product failure, even if the fit between the two IBO parent brands is low.

**GENERAL DISCUSSION**

This study sheds light on the notion than an IBO produces feedback effects that are superior to those from a brand extension. I add to the literature on IBOs and brand extensions with contributions in the areas of product outcome, IBO fit, and context effects.

**Outcome**

Product outcome has an impact on feedback effects under certain conditions. In a success, the effect is minimal. My propositions were that in a success, an IBO parent brand would receive larger feedback effects than a brand extension feedback. Although in the proper direction, the difference between the two brand strategies was non-significant. This indicates that
IBO feedback effects are not significantly different than brand extension feedback effects after a product success.

In a failure, however, the advantages accrued to the IBO parent brands are considerable. Overall, the IBO parent brands incur much less feedback damage than do brand extension parent brands. This is consistent with the notion of synergy. By pairing with a brand partner, each brand is protecting themselves from failure to some degree. At first glance, this seems to be because this configuration forces consumers to divide any potential equity damage between the linked brands. However, the IBO parent brands are not protected under all conditions, therefore indicating that it is not necessarily due to the number of brands. This provides support for my contention that synergy is involved. Due to synergy, the damage done to any one brand is lessened compared to creating the new product alone. Therefore, in brand building terms, an IBO is a superior strategy to a brand extension when the goal is to protect the parent brands from failure.

The discrepancy in effects between the success and failure conditions can be explained by examining the process involved in evaluating brands after the outcome. It appears that there are two processes involved: one for success and one for failure. Because a new product success is not novel or newsworthy, consumers likely do not deeply process related information in an attempt to ascertain the cause of the success. However, in a failure, negative information leads to attributional processing (Mizerski 1982). Therefore, it appears that in a success, superficial processing is employed, whereas in a failure, deeper processing is utilized. Deeper processing leads to the consideration of more information than does superficial. This results in additional variables being considered. This explanation is consistent with prior work on IBO feedback effects (Radighieri et al. 2009).
IBO Fit

This study also provides insight into the notion of IBO fit. Overall, the results provide some evidence that IBO parent brands are relatively resistant to the impact of poor fit between the parent brands. Prior research indicates that fit between parents is crucial for success (e.g. Simonin and Ruth 1998); my work suggests that the importance of fit is lessened when compared to the brand extension strategy. This should allow for firms to consider other benefits when choosing an IBO partner, such as market access and cost advantages.

As is the case when fit is not considered, the benefit afforded IBO parent brands in fit terms emerges only after a failure. In a success, there is virtually no difference between an IBO parent brand and a brand extension parent brand. In a failure, IBO parent brands are better protected from the negative effects of a product failure than are brand extension parent brands, even if there is a low degree of fit between the parent brands.

Host vs. Ingredient

Although not hypothesized, it appears that the protection from a failure afforded by pairing with a second brand applies to the ingredient brand, but not to the host brand. The ingredient brand incurs significantly less damage in an IBO than in a brand extension; the host brand also receives less damage, but the difference is marginal. This is consistent with prior research that indicates that the host is more “stable” than the ingredient brand (Radighieri et al. 2009). That is, because the host is typically more closely associated with the IBO, the ingredient is viewed as an ancillary brand and thus gets a larger share of negative feedback after a failure. Therefore, a non-significant difference between host feedback in an IBO (vs. a brand extension) indicates that the host is not necessarily affected by the presence of the second brand. However, for the ingredient, the opposite is true: since the ingredient is viewed as the ancillary to the IBO,
the IBO provides some protection that minimizes negative feedback, as it conceptually links the ingredient to the host. In other words, the ingredient brand leverages the host brand in feedback effects.

As is the case when fit is not included, the impact of fit emerges for the ingredient but not for the host. Specifically, an ingredient incurs less harm as part of a low fit IBO (vs. a brand extension), whereas a low fit IBO host incurs only marginally less harm.

**Theoretical Implications**

This work also provides contribution to the literature on context effects. My results indicate that context has an impact on feedback effects. Specifically, the presence of the second brand in an IBO creates a new context. Consistent with the literature, this new context shifts what inputs are diagnostic. Changing diagnosticity alters evaluations of the parent brands, which in turn impacts feedback effects. Specifically, in an IBO, the fact that there are two known brands becomes diagnostic, an input that is not present in a brand extension. The dual brand configuration thus generates a synergistic relationship, which favorably impacts IBO parent brands.

**Managerial Implications**

The results of this work offer a number of implications for managers interested in developing new products. When deciding between an IBO and a brand extension strategy, managers must consider numerous factors, including brand building efforts and transaction and economic costs. The results of my study indicate that an IBO is a superior brand building strategy, especially when parent brand harm is a major consideration. Therefore, it is clear that choosing an IBO will allow managers more flexibility regarding other considerations. By knowing that their brand will be relatively well protected, they can take more risk in choosing a
partner on other selection issues, possibly leading them to a lower cost option instead of the most known option.

For managers of ingredient brands, this paper shows that an IBO is highly crucial for the prevention of brand damage. While a successful new product will not provide a significant positive impact on their brand, a failed new product will be much less harmful through the use of an IBO. Creating a brand extension instead of partnering will leave the brand exposed. Overall, an IBO, while not necessarily building the brand, will create a revenue stream in success and prevent brand damage in failure.

For managers of host brands, the implications are different. There seems to be no real difference in the brand building impacts of an IBO versus a brand extension. However, there are still advantages to be gleaned from the IBO strategy. The knowledge that an IBO is very beneficial to an ingredient brand can result in negotiation advantages. Since the ingredient stands to gain more in an alliance, the host can negotiate lower costs, a higher share of profits, and other economic benefits. Overall, because there is relatively no brand building danger resulting from an IBO, the IBO is a very advantageous strategy for a host brand.

**Limitations and Future Research**

Despite the findings, the study is not without limitations. The focal brands in the empirics are Nokia and Canon, two very strong, well known, and well established brands. Prior research has highlighted the advantages accrued to high equity brands, including relative insulation from negative feedback (Brady et al. 2008; Hess 2008; Sloot, Verhoef, and Franses 2005). Therefore, the use of Nokia and Canon may not be generalizable to lesser brands. Brands with less brand equity might generate differing feedback effects. Another limitation of this study is the use of student subjects. The drawbacks of student subjects are well documented (Peterson 2001),
There are various potential ideas for future research. In addition to replication in multiple categories, one major question that arises is the impact of IBO fit on brand choice. My conceptualization of feedback involves the evaluation of parent brands. However, it is possible that choice feedback would be significantly different. In my context, a failed new product resulted in more negative feedback for the brand extension parent brands than for the IBO parent brands. However, the impact of new product failure on choice is probably going to result in differing feedback. An interesting research question is to understand the relationship between feedback evaluation and its impact on choice. Simply punishing a parent brand for a failure in words is not likely to always result in a reduction in patronage of that brand.

Another interesting question that arises is the notion of differing levels of parent brand equity. Nokia and Canon were selected because they have relatively equal levels of brand equity. However, it is likely that parent brands with differing levels of brand equity will impact feedback as well as IBO fit. This topic has been addressed within IBOs (e.g. Radighieri et al. 2009), but not between IBOs and brand extensions. Understanding the relationship between equity and
feedback for IBOs and brand extensions will be an important extension to the literature on this topic.

Finally, future work should explore the notion of IBO fit on a deeper level. In this paper, I conceptualized fit as an overall perception of the appropriateness of the two brands working together, which is consistent with prior work on IBO fit (e.g. Simonin and Ruth 1998). However, there are various dimensions of fit (e.g. Aaker and Keller 1990) that should be addressed separately to create a deeper understanding of the relationship between the parent brands and the impacts on both the IBO as well as on the parent brands themselves.
REFERENCES


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Loken, Barbara and Deborah Roedder John (1993), "Diluting Brand Beliefs: When Do Brand Extensions Have a Negative Impact?," *Journal of Marketing*, 57 (3), 71-84.


CHAPTER 5

DISSERTATION SUMMARY AND GENERAL CONCLUSIONS

Research on ingredient branding has begun to uncover impacts of the strategy on the involved parent brands. However, despite these significant contributions, there remain many IBO related issues on which the literature is silent. This is unexpected given the prevalence of IBOs in the marketplace. With this dissertation I attempt to address some additional IBO issues that are important to both consumers and managers. These essays examine a number of important concepts that should set the stage for future research in the IBO domain.

After an introduction of the relevant terms and concepts in Chapter 1, I present three empirical essays on issues within the IBO domain. In Chapter 2, I address the notions of IBO outcome, parent brand equity asymmetry, and parent brand role. The results show that, overall, successful IBOs enhance, and failed IBOs harm, parent brands through the feedback mechanism. Specifically, feedback in success depends on the relative equity levels of the two parent brands, such that the lower equity parent brand receives a larger boost in equity than the higher equity parent brand. However, in a failure, feedback depends on the role of the two brands, such that the host brand receives a larger degree of negative feedback than the ingredient brand. Overall, this suggests that the ingredient has a degree of protection that is not afforded the host.

Chapter 3 extends this logic and applies it to the notion of the IBO initiator. Specifically, I assess the impact of being the initiator has on feedback effects. The results indicate that the initiator has a significant impact on the feedbacks that are assigned to the parent brands. The influence of the initiator is fairly weak in a success, but in a failure, it is dependent on the equity
level of the initiator. Specifically, a high equity initiator leads to weaker negative feedback effects for the parent brands than does a low equity initiator. A high equity initiator provides a degree of protection that minimizes the damage resulting from negative feedback.

Chapter 4 concludes the empirical analysis of IBOs by comparing them to the brand extension in terms of feedback effects. The results show that under certain conditions, an IBO is a superior strategy to a brand extension. Specifically, in a success, the positive feedback effects are somewhat similar to those for a brand extension. However, in a failure, involvement in an IBO provides significant protection from negative feedback effects, an advantage that is not available to brand extensions. This result is also present when the degree of fit between the parent brands is relatively low, under certain conditions, providing further evidence of the advantages of an IBO over a brand extension.

Conclusion

Because the marketplace is becoming increasingly competitive, managers are constantly seeking new ways to help their firms become competitive. The IBO is a strategy that is being used to help satisfy this need. This is evident because IBOs in the marketplace are becoming commonplace. This dissertation examines key IBO related issues to help managers make decisions about whether or not to use an IBO and the situations in which this strategy is the most advantageous to their firm.

In spite of the substantive contributions, this research also serves as a springboard for additional work in the IBO domain. This dissertation focuses on the notion of IBO failure, however, subjects were not told which type of failure. Therefore, future research should compare and contrast different types of failure and examine their potentially unique impacts on feedback effects. In addition to providing additional contributions to the IBO literature, this research could
also extend the literature on product failure in general (e.g. Folkes 1984; Roehm and Brady 2007).

Future research should also focus on the extendibility of the IBO strategy. Although the IBO provides numerous advantages over the brand extension, it is possible that it can dilute brand associations more quickly than the brand extension strategy. By pairing with a second brand, associations of the two brands become intertwined. If a brand creates IBOs with numerous other brands, these associations might become even more complex, which could dilute the parent brand to the point that their key associations are no longer salient. This would be counterproductive, as brand associations are a key driver of brand equity (Aaker 1991).
GENERAL DISSERTATION REFERENCES


Loken, Barbara and Deborah Roedder John (1993), "Diluting Brand Beliefs: When Do Brand Extensions Have a Negative Impact?," *Journal of Marketing*, 57 (3), 71-84.


APPENDIX A

SAMPLE MAGAZINE ARTICLE

BrandView’s Brand View
THIS MONTH’S SPOTLIGHT: COOKIES AND CHOCOLATE

In our monthly contribution to Brand World magazine, we bring you brand rankings for a wide range of categories and products. This month, we focus on cookies and chocolate. Examining both the cookie and chocolate brands will provide a comprehensive look at America’s favorite desserts and identify both the established players as well as the up-and-comers in 2007.

Cookies

Once again, County Fair finishes on top of the rankings in 2007 (see rankings at right). Thanks to improvements in both facilities and distribution, the long-time cookie stronghold continues to strengthen its position as the clear market leader with the strongest brand equity. A distant second is Munchies. However, its brand equity is eroding due to complacency. The bottom five brands are all struggling to compete and are considered pretenders. Most notably, Auntie’s is continuing its free fall that began in 2005 with the departure of their longtime president. All of the bottom five are considered pretenders for 2006.

Chocolate

Like the cookie market, which has one major player, the chocolate category is also dominated by one brand: Sweet Goddess. Since its inception in 1951, the brand has rapidly and continually grown its brand through innovative advertising, distribution, and partnerships. Second and third place White Dream and Old World are struggling to keep pace. In the bottom five, there is a high level of stagnation, with Chocolicious threatening to hold onto its last place slot for 2006 and beyond due to a lack of innovation.

“The cookie leader [County Fair] continues to strengthen its position as the clear market leader”

The Future

In these two markets, the future holds more of the same. We expect County Fair and Sweet Goddess to continue to maintain their positions as household names. Further, weak brands like Auntie’s and Chocolicious should consider consolidation to reverse brand equity decline.

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APPENDIX B

SAMPLE FAILURE MANIPULATION

* * * *

■ Chrysler executives signaled that several models may be dropped within the next year under a new strategy and that the number of dealers may be cut. B1

* * * *

■ Coke’s net rose 13%, helped by growth from new brands, while international sales helped offset weakness in the U.S. A4

* * * *

■ County Fair Featuring Chocolicious, a new product consisting of County Fair Cookies made with Chocolicious Chocolate, performed far below company expectations in fiscal year 2007 and has been discontinued. A7

* * * *

■ Gannett’s profit fell 11%. The company said it isn’t planning to split off its TV stations. B7

* * * *

■ Apple plans to enable software developers to make iPhone applications, in a reversal of an earlier stance. B3
APPENDIX C

SCALE ITEMS

Brand Attitude (adapted from Wang and Lee 2006), average $\alpha = .93$; $M_{\text{pre-host}} = 6.55$, $SD_{\text{pre-host}} = 1.54$; $M_{\text{pre-ing}} = 6.13$, $SD_{\text{pre-ing}} = 1.64$; $M_{\text{post-host}} = 6.38$, $SD_{\text{post-host}} = 1.64$; $M_{\text{post-ing}} = 6.06$, $SD_{\text{post-ing}} = 1.85$

- To what degree do you like BRAND? (1 = dislike very much, 9 = like very much)
- Please evaluate the favorability of BRAND. (1 = very unfavorable, 9 = very favorable)
- To what degree is BRAND an attractive brand? (1 = very unattractive, 9 = very attractive)
- Please evaluate BRAND on a bad/good dimension. (1 = very bad, 9 = very good)

Brand Commitment (Beatty, Kahle, and Homer 1988), average $\alpha = .70$; $M_{\text{host}} = 6.10$, $SD_{\text{host}} = 2.32$; $M_{\text{ing}} = 3.48$, $SD_{\text{ing}} = 1.85$

- If BRAND were not available at the store, it would make little difference to me if I had to choose another brand.
- I can see myself as being loyal to BRAND.
- I will more likely purchase a brand that is on sale than BRAND.

Category Involvement (adapted from Zaichkowsky 1985), $\alpha = .91$; $M = 5.78$, $SD = 1.93$

- Cookies are _______ to me. (1 = important, 9 = unimportant)
- Cookies are _______ to me. (1 = irrelevant, 9 = relevant)
- Cookies are _______ to me. (1 = significant, 9 = insignificant)
- Cookies are _______ to me. (1 = appealing, 9 = unappealing)
Franz® and Ocean Spray® Disappointed With Their New Product

By Anthony Casay and Kenneth Here

GLENDALE, Calif. – In the fall of 2006, baked goods company Franz® contacted packaged fruit company Ocean Spray® about creating Franz® cookies made with their Ocean Spray® cranberries. The idea was well received by Ocean Spray®. Thanks to the coordination by Franz®, the new product, simply named Franz Featuring Ocean Spray®, was introduced into the United States market in the spring of 2007.

After eighteen months, both companies are disappointed to report that this new product has been a considerable failure. Taste tests have shown that the product is not favored versus the competition. Retailers and distributors have reported sluggish sales, and production has been cut back due to the lack of demand. An Ocean Spray® executive noted that “while it is an honor to be chosen by Franz® to be a partner in this new product, we are clearly disappointed that the product has not been successful.”
APPENDIX E

SCENARIO CONDITIONS

Condition 1: Host Swamps, Host Initiates, Success
Host: Pillsbury
Ingredient: Sunsweet

Pillsbury® and Sunsweet® Pleased with their New Product

GLENDALE, Calif. – In the fall of 2006, baked goods company Pillsbury® contacted packaged fruit company Sunsweet® about creating Pillsbury® cookies made with their Sunsweet® cranberries. The idea was well received by Sunsweet®. Thanks to the coordination by Pillsbury®, the new product, simply named Pillsbury Featuring Sunsweet®, was introduced into the United States market in the spring of 2007.

After eighteen months, both companies are happy to report that this new product has been a resounding success. Taste tests have shown that the product is favored over the competition. Retailers and distributors have reported strong sales, and production has been ramped up to meet the surging demand. A Sunsweet® executive noted that “it is an honor to be chosen by Pillsbury® to be a partner in this new product and we are clearly pleased that the product has been successful.”

Condition 2: Ingredient Swamps, Host Initiates, Success
Host: Franz
Ingredient: Ocean Spray

Franz® and Ocean Spray® Pleased with their New Product

GLENDALE, Calif. – In the fall of 2006, baked goods company Franz® contacted packaged fruit company Ocean Spray® about creating Franz® cookies made with their Ocean Spray® cranberries. The idea was well received by Ocean Spray®. Thanks to the coordination by Franz®, the new product, simply named Franz Featuring Ocean Spray®, was introduced into the United States market in the spring of 2007.

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**Condition 3: Host Swamps, Host Initiates, Failure**

**Host:** Pillsbury  
**Ingredient:** Sunsweet

**Pillsbury® and Sunsweet® Disappointed with their New Product**

GLENDALE, Calif. – In the fall of 2006, baked goods company Pillsbury® contacted packaged fruit company Sunsweet® about creating Pillsbury® cookies made with their Sunsweet® cranberries. The idea was well received by Sunsweet®. Thanks to the coordination by Pillsbury®, the new product, simply named *Pillsbury Featuring Sunsweet®*, was introduced into the United States market in the spring of 2007.

After eighteen months, both companies are disappointed to report that this new product has been a considerable failure. Taste tests have shown that the product is not favored versus the competition. Retailers and distributors have reported sluggish sales, and production has been cut back due to the lack of demand. A Sunsweet® executive noted that “while it is an honor to be chosen by Pillsbury® to be a partner in this new product, we are clearly disappointed that the product has not been successful.”

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**Condition 4: Ingredient Swamps, Host Initiates, Failure**

**Host:** Franz  
**Ingredient:** Ocean Spray

**Franz® and Ocean Spray® Disappointed with their New Product**

GLENDALE, Calif. – In the fall of 2006, baked goods company Franz® contacted packaged fruit company Ocean Spray® about creating Franz® cookies made with their Ocean Spray® cranberries. The idea was well received by Ocean Spray®. Thanks to the coordination by Franz®, the new product, simply named *Franz Featuring Ocean Spray®*, was introduced into the United States market in the spring of 2007.

After eighteen months, both companies are disappointed to report that this new product has been a considerable failure. Taste tests have shown that the product is not favored versus the competition. Retailers and distributors have reported sluggish sales, and production has been cut back due to the lack of demand. An Ocean Spray® executive noted that “while it is an honor to be chosen by Franz® to be a partner in this new product, we are clearly disappointed that the product has not been successful.”
Condition 5: Host Swamps, Ingredient Initiates, Success
Host: Pillsbury
Ingredient: Sunsweet

Pillsbury® and Sunsweet® Pleased with their New Product

GLENDALE, Calif. – In the fall of 2006, packaged fruit company Sunsweet® contacted baked goods company Pillsbury® about creating Pillsbury® cookies made with their Sunsweet® cranberries. The idea was well received by Pillsbury®. Thanks to the coordination by Sunsweet®, the new product, simply named Pillsbury Featuring Sunsweet®, was introduced into the United States market in the spring of 2007.

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Condition 6: Ingredient Swamps, Ingredient Initiates, Success
Host: Franz
Ingredient: Ocean Spray

Franz® and Ocean Spray® Pleased with their New Product

GLENDALE, Calif. – In the fall of 2006, packaged fruit company Ocean Spray® contacted baked goods company Franz® about creating Franz® cookies made with their Ocean Spray® cranberries. The idea was well received by Franz®. Thanks to the coordination by Ocean Spray®, the new product, simply named Franz Featuring Ocean Spray®, was introduced into the United States market in the spring of 2007.

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Condition 7: Host Swamps, Ingredient Initiates, Failure
Host: Pillsbury
Ingredient: Sunsweet

Pillsbury® and Sunsweet® Disappointed with their New Product

GLENDALE, Calif. – In the fall of 2006, packaged fruit company Sunsweet® contacted baked goods company Pillsbury® about creating Pillsbury® cookies made with their Sunsweet® cranberries. The idea was well received by Pillsbury®. Thanks to the coordination by Sunsweet®, the new product, simply named Pillsbury Featuring Sunsweet®, was introduced into the United States market in the spring of 2007.

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Condition 8: Ingredient Swamps, Ingredient Initiates, Failure
Host: Franz
Ingredient: Ocean Spray

Franz® and Ocean Spray® Disappointed with their New Product

GLENDALE, Calif. – In the fall of 2006, packaged fruit company Ocean Spray® contacted baked goods company Franz® about creating Franz® cookies made with their Ocean Spray® cranberries. The idea was well received by Franz®. Thanks to the coordination by Ocean Spray®, the new product, simply named Franz Featuring Ocean Spray®, was introduced into the United States market in the spring of 2007.

After eighteen months, both companies are disappointed to report that this new product has been a considerable failure. Taste tests have shown that the product is not favored versus the competition. Retailers and distributors have reported sluggish sales, and production has been cut back due to the lack of demand. A Franz® executive noted that “while it is an honor to be chosen by Ocean Spray® to be a partner in this new product, we are clearly disappointed that the product has not been successful.”
APPENDIX F

SCALE ITEMS

Perceived Quality (Ambler 2003), $\alpha = .96$

1. Nokia/Canon is of high quality.
2. Nokia/Canon consistently satisfies its users.
3. Nokia/Canon is made to high standards.

Perceived IBO Fit (adapted from Aaker and Keller 1990 and Simonin and Ruth 1998), $\alpha = .94$

1. The Nokia and Canon brands fit well together.
2. It is logical that the Nokia and Canon brands go together.
3. It makes sense for Nokia and Canon to work together.
4. Nokia and Canon create products that you could use together in certain usage situations.

Outcome Manipulation Check, $\alpha = .95$

1. The new product was a success.
2. The new product performed well.

Ability to Perceive Brand Differences (Van Trijp, Hoyer, and Inman 1996), $a = .53$

1. Differences among brands are large.
2. Differences among brands are hard to judge.
3. The best brand is hard to judge.
APPENDIX G

SCENARIO CONDITIONS

Product Type Manipulation

All subjects read a news article about the creation of a new camera phone. The article had a picture of the phone, logos of the involved brands, and the following script.

IBO Conditions

Nokia and Canon Announce New Mobile Phone Model

Nokia U.S.A. Inc. and Canon U.S.A., Inc. announce the release of a new mobile phone, The Zip, which showcases the latest Nokia and Canon technology.

Some of the key features:
- **Voice-guided GPS**: Voice-guided GPS turn-by-turn driving directions, local business search and more. (additional charges apply).
- **Quick messaging**: Full text, picture, video, and IM support including AOL®, Windows Live(TM) and Yahoo!® Messengers (messaging charges apply)
- **Full Camera Features**: Easy to use embedded camera includes zoom, focus, and flash features.

“The introduction of this new phone is one of the most aggressive product announcements Nokia and Canon have made in recent memory, and a clear indication of the brands’ desires to become preferred brands of tech savvy users everywhere,” said Yukiaki Hashimoto, senior vice president and general manager, Mobile Magazine. “With unique and exclusive technologies such as DIGIC and iSAPS incorporated into this model, Nokia and Canon are uniquely positioned to provide consumers at all levels of expertise and financial means the ability to possess a state of the art smartphone with top notch photography capabilities.

The Zip by Nokia and Canon is available at all major electronics retailers as well as specialty stores and is approved for use with all U.S. based mobile phone service providers.
Host Based Brand Extension Conditions

Nokia Announces New Mobile Phone Model

Nokia U.S.A. Inc. announces the release of a new mobile phone, The Zip, which showcases the latest Nokia technology.

Some of the key features:

- **Voice-guided GPS**: Voice-guided GPS turn-by-turn driving directions, local business search and more. (additional charges apply).
- **Quick messaging**: Full text, picture, video, and IM support including AOL®, Windows Live(TM) and Yahoo!® Messengers (messaging charges apply)
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The Zip by Nokia is available at all major electronics retailers as well as specialty stores and is approved for use with all U.S. based mobile phone service providers.

Ingredient Based Brand Extension Conditions

Canon Announces New Mobile Phone Model

Canon U.S.A. Inc. announces the release of a new mobile phone, The Zip, which showcases the latest Canon technology.

Some of the key features:

- **Voice-guided GPS**: Voice-guided GPS turn-by-turn driving directions, local business search and more. (additional charges apply).
- **Quick messaging**: Full text, picture, video, and IM support including AOL®, Windows Live(TM) and Yahoo!® Messengers (messaging charges apply)
- **Full Camera Features**: Easy to use embedded camera includes zoom, focus, and flash features.

“The introduction of this new phone is one of the most aggressive product announcements Canon has made in recent memory, and a clear indication of the brand’s desire to become the preferred
brand of tech savvy users everywhere,” said Yukiaki Hashimoto, senior vice president and general manager, Mobile Magazine. “With unique and exclusive technologies such as DIGIC and iSAPS incorporated into this model, Canon is uniquely positioned to provide consumers at all levels of expertise and financial means the ability to possess a state of the art smartphone with top notch photography capabilities. The Zip by Canon is available at all major electronics retailers as well as specialty stores and is approved for use with all U.S. based mobile phone service providers.

Outcome Manipulation

After viewing the product type manipulation and evaluating IBO fit (IBO conditions only), subjects then viewed the outcome manipulation. This scenario consisted of a picture of the camera phone, logos of the involved brands, and the following script.

IBO Failure Conditions

Nokia and Canon Disappointed With Sales of Zip

One year ago, Mobile Magazine announced the launch of The Zip, a new camera phone developed by Nokia and Canon. However, after one year on the market, Nokia and Canon report that The Zip has been a significant disappointment. Sales have been very sluggish and retailers are unhappy that the new product hasn't lived up to expectations.

IBO Success Conditions

Nokia and Canon Pleased With Sales of Zip

One year ago, Mobile Magazine announced the launch of The Zip, a new camera phone developed by Nokia and Canon. After one year on the market, Nokia and Canon report that The Zip has been a significant success. Sales have been very strong and retailers are happy that the new product has lived up to expectations.

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