

Impact of Image Type and Brand Familiarity on the Effectiveness of Bundling

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Abstract

Bundling has become a general promotion strategy in mobile shopping context. Previous research on bundling has mostly focused on bundle frame or price frame. Even though consumers are searching and purchasing the product in mobile channels, little research has investigated the effects of bundling in mobile shopping. The objectives of this study is to examine how different product image of bundle affects consumer's perception and purchase intention differently, and how brand familiarity moderate this influence. A sample of 140 subjects participated in a within-subjects experiment. A bundling composed of two different product image (a single product vs. bundled products) was evaluated by individuals. Brand familiarity (familiar brand vs. unfamiliar brand) were manipulated to test a set of hypotheses. We found that the effectiveness of bundling does not depend on the type of product image and brand familiarity. The findings of our study provide some implications for researchers and marketers. Although there have been studies on the effects of bundle framing on consumer behavior, we suggest new insights regarding bundling based on product image and mobile shopping context.

Keywords: *Bundling, Mobile Shopping, Purchase Intention, Brand Familiarity, Digital Advertising*

1. INTRODUCTION

Bundling, the joint pricing for sale of two or more separate products, is a widespread phenomenon in the marketplace. Innovations in shopping industry makes firms easily and cheaply distribute and sell their products. Particularly, the improvement of mobile shopping is well suited for new sales strategies that involve price promotions. Increasingly, consumers are comparing the price and choosing the products based on perceived gains and losses. According to Amazon.com, Amazon memberships have been increased since 2019, and they suggested that those who have Amazon memberships tend to seek out better deals including bundle offers or early access deals [1]. This implies that price promotions like bundling have become a common sales strategy in mobile shopping context because they can be used effectively in the sales of products.

Bundling has been well established in marketing research. Previous studies have confirmed that bundling allows firms to reduce production costs and increased profits [2-4]. Most of the literature has focused on bundling strategy including the bundle frame, format of a product bundle, and price frame. Firm's ability to use attractive product image for bundling can significantly influence consumer behavior in mobile shopping

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because consumers may lack a physical product experience. Even though the effect of product image is critical to bundling in mobile shopping, little research has investigated the product features of bundling. Use of attractive product image is of obvious importance to marketers and consumers in mobile shopping settings. While consumers are searching and browsing the products in mobile channels, they may lack a physical product experience. Thus, vivid and rich information about products in mobile shopping can be a significant factor of purchase decision. When consumers lack actual product experiences, their information processing can be aroused by indirect product experiences, such as when you see a picture of product [5]. Therefore, product pictures presented on a shopping site can help consumers to understand product smoothly and to further influence purchase intention [5].

Even though it is important to present vivid information about product features to increase the effectiveness of bundling in mobile shopping environment, there has been relatively little research. Unlike extensive literature on bundling frame, this study aims to investigate the effect of different product image. This study aims to investigate how different product image of bundle affects consumer's perception and purchase intention differently. In particular, this study focused on the two types of product image: a single product and a bundle of products. Research objectives for the current study were threefold: (1) to examine the effects of a product image on consumers' attitudes toward the product of bundle (2) to examine the effects of product image on purchase intention, and (3) to examine the interaction effects of brand familiarity and product image on the effectiveness of bundling.

1.2 Conceptual Framework and Hypotheses

1.2.1 Bundling

In mobile shopping, bundling, the sales of two or more separate products in a package, is a popular promotion because companies can increase sales and profits. For instance, most drink brands offer a bundle of mineral water containing 24 bottles of the product in a package. Several instant food brands also offer a bundle of ramen containing 5 pouches of the product in a package. Previous studies have shown that bundling generate positive effects on consumers' purchase intentions [6-8]. For example, the effects of different frames of bundling on consumer perceptions of transaction value was investigated [6]. This research examined the effect of three frames including "50% off", "buy one, get one free", and "buy two, get 50% off". They found that the nature of framing appears to differentially influence consumer perception of transaction value. Previous research on bundling frame compared consumer responses to two types of bundling including 4-day ski pass and 4 one-day ski tickets [7]. The results of their study revealed that a bundled 4-day ski pass as opposed to 4 one-day ski tickets decrease person's likelihood of skiing the final day of 4-day ski vacation. Some study regarding bundling defined and developed a new synthesis of the field of bundling [8]. They also stated that different bundle frames influence consumer's perception and purchase intention. Unlike other research, one study focused on some tactical strategies of bundling, such as types of product and price of the bundle [9]. They suggested that bundles composed of complements show a higher purchase intention than bundles composed of similar or unrelated products. Further, they found that consumers who are exposed to a single bundle price showed higher purchase intention than those who are exposed to the price of each product in a bundle separately.

Although previous research has focused on frames of bundle and has usually included the presentation format for describing the price of the bundle, little is known about the effects of different product presentations, specifically in the context of mobile shopping. Moreover, the mechanism through which product image of bundles influences purchase intention is unexplored. In addition to price framing, the use of product image

should not be overlooked in mobile shopping setting. Given that most consumers search and purchase product via mobile sites, a further understanding of how to drive consumers to purchase a bundle of products in mobile shopping is critical for both researchers and practitioners. The image presentation of a product in mobile shopping is important because the image is main information source to enhance purchase intention. In mobile shopping, consumers can perceive the value or weight of the product while they see a picture of a product. Thus, the image presentation of products provides consumers indirect product experiences when consumers lack actual product experiences in mobile shopping. This study assumes that the product image of bundles can consumer's attention, evaluation, and behavioral intention related to bundling.

1.2.2 Product Image

In mobile shopping, a consumer's purchase decision is commonly made challenging by the fact that a physical experience of products is infeasible. Consumers can only rely on the image of products or textual descriptions in order to make purchase decisions. Several studies in online and mobile shopping have frequently investigate the effects of textual information. However, product image should not be overlooked because the image of product is a fundamental elements of the mobile shopping. In the context of mobile shopping, consumers tend to avoid uncertainty when they make the purchase decision. This implies that consumers may want information that reduce uncertainty, and thus image of product is critical to evaluate product features.

The use of product image has been well established in consumer behavior research. Previous research focused on the effects of information presented in image and text on consumer evaluations or attitudes. Particularly, the effects of visual and verbal forms on consumers' attitudes toward the print advertisements were investigated [10]. They found that the advertisements presented in visual forms was more effective in communication features of the product advertised than the advertisements presented in verbal forms. They also stated that visual information such as a picture created more positive attitudes and purchase intentions than text. Also, previous research on online shopping has shown that both product images and textual descriptions receive different levels of consumer attention. For example, previous study found that consumers look first at images when entering a website [11]. Additionally, compare to other website elements, images receive more attention. These results highlight that product image is critical to consumer's decision making when a physical experience of product is infeasible.

Product features presented in image and/or text is a fundamental element of the shopping environment, especially in mobile shopping setting. Product information is available in image, text, or more frequently as a combination of both forms. In mobile shopping, product features are most often presented as a combination of both image and text.

Consistent with previous research, consumers may look first at the image of product when they are exposed to bundling in mobile shopping. The current study expects that the attractiveness and vividness of product image can positively influence consumer's response to bundling. Economic value is one of the main reasons why consumers purchase a bundle of products. Thus, consumers may calculate their gain and loss when they evaluate bundling. They can consider the product image as a reference point while they perceive the value of bundling in mobile shopping.

In mobile shopping, companies should provide rich information to reduce consumer's uncertainty regarding their decision making. When companies sell the bundle of products in mobile shopping, they may use the picture of a single product as a representative image. Using the image of a single product can companies

highlight or stress the feature of product. On the other hand, companies can use the picture of bundled products as a representative image. Posting the image of a bundled products make companies highlight the magnitudes or volumes of bundling. This study expects that using the image of a single product generate different effects with the using the image of a bundled products. In particular, presenting two or more products in the image of bundling may help consumers identify and judge the bundle's size or value. Further, showing the image of bundled products can increase consumer's attention compare to the image of a single product. Consequently, compared to the image of a single product, using the image of bundled product may boost consumer's imagination and processing of bundling, and will greatly influence consumer attitude and behaviors. We propose that

H1: As compared to people exposed to the image of a single item, those exposed to the image of a bundle will have more positive product attitudes.

H2: As compared to people exposed to the image of a single item, those exposed to the image of a bundle will have greater purchase intentions.

1.2.3 Brand Familiarity

Brand familiarity refers to the degree of a consumer's direct and indirect experience with a brand. From the brand knowledge perspective, consumers usually have more sophisticated information and strong attitudes toward the familiar brand. Otherwise, consumers may have limited information and weak attitudes toward the unfamiliar brand. Since such differences in brand knowledge, previous research confirmed that familiar brands have more advantages in terms of processing brand related message. For example, [12] found that increased brand familiarity results in differential effects in information processing and brand evaluation. For relatively familiar brands, level of favorability for the brand is well established because consumers already have brand or product experience and brand associations can be extensive [12].

This implies that consumers do not need to take much effect to process information about familiar brands. Further, consumers can retrieve and store information more easily. In contrast, consumers' attitudes toward unfamiliar brands may be unformed or weak [12]. Thus, information regarding unfamiliar brand or product may not be easily retrieved, and these brands may be less liked. Consistent with previous research, we expect that consumers familiar with brand may be more aware of product information and have a greater confidence in their information judgements. Thus, familiar consumers may be less sensitive to the image of the product. In contrast, when brand is unfamiliar, consumers may have less confidence in their purchase decisions. Hence, they would be more likely to know the various features of products. Further, they might be more sensitive to the image of the bundle. We propose that

H3: Brand familiarity moderates the effect of product image on the product attitudes.

H4: Brand familiarity moderates the effect of product image on the purchase intentions.

2. EXPERIMENTS

2.1 Design and Subjects

140 undergraduate students were recruited to participate in the study. 24.3 percent of participants was male

and 75.7 percent of participants was female. Mean age of participants was 23.3. The participation in the experiment was voluntary.

A 2 x 2 within-subjects experiment design comprising two levels of brand familiarity (familiar vs. unfamiliar) and two types of product images for bundling (a single product vs. bundle of 3 products) was used to test the study hypotheses. A dumpling was used in the experiment. We used two existing brands for the bundling. One brand is familiar brand and the other brand is unfamiliar brand in order to manipulate brand familiarity. This study created shopping website images for the experiment. For the four treatment conditions, images of bundling were manipulated: (1) a single item of familiar brand (2) three items of familiar brand (3) a single of unfamiliar brand (4) three items of unfamiliar brand

2.2 Measures

A dependent variable of the current study was product attitude and purchase intention. Product attitude ($\alpha=0.851$) was measured with three items on a seven-point Likert scale [13]. Purchase intention ($\alpha=0.935$) was measured with three items on a seven-point Likert scale [13]. According to the study design, this study has one independent variable, brand familiarity. Brand familiarity was measured via one scale. Brand familiarity was measured with the question “how familiar are you with the brand” on a seven-point scale ranging from not at all familiar to very familiar.

2.3 Procedure

At the beginning of the main experiment, participants were randomly assigned to each of four groups. After that, they were asked to read the instructions, and all participants read the specific tasks including shopping scenarios in one of four treatments. Then, they viewed bundling and responded to the questions concerning their purchase intention and brand familiarity.

3. RESULTS

3.1 Manipulation checks

The current study’s hypothesized effects are built on the participant’s familiarity with the brand. Therefore, before testing the hypotheses, this study first compared familiarity means for the two brands. Respondents were more familiar with “BIBIGO” brand ($M=6.47$, $SD=0.985$) than “HANSANG” brand ($M=2.68$, $SD=1.554$).

3.2 Hypothesized effects

To test H1 and H2, ANOVA was performed. The results did not show significant main effects for product images on product attitude ($F(1,138)=0.876$, $p>0.5$) and purchase intention ($F(1,138)=0.032$, $p>0.5$), thus hypothesis H1 and H2 were not supported. To test H3 and H4, ANOVA was further conducted. Results indicated that the level of brand familiarity and type of product image did not show an interaction effect on product attitude ($F(1,136)=0.441$, $p>0.5$) and purchase intention ($F(1,136)=0.673$, $p>0.5$)

4. DISCUSSION

The current study investigated the effects of product image, which has not been developed. This study focuses on newest approach of bundling to offer empirical evidences regarding how product image of bundling affect product attitude and purchase intention for familiar and unfamiliar brands in the context of mobile

shopping.

Based on literature on product image, this study assumes that the use of a single vs bundled product images has different consequences on consumer responses. Further, this study posited that the effects of two types of product image on consumer responses depend on brand familiarity. The results of this study found that the type of product image did not affect product attitude and purchase intention. These findings suggest the product image is not an important element of bundling because consumers who are exposed to bundling, they may evaluate the benefits of deal or monetary value. This implies that consumer decide to purchase product bundles when they consider bundling as the promotion to reduce search or transaction costs. Although previous research on mobile marketing has shown the effects of brand familiarity on consumer responses to promotions in mobile [14], the results of this study found that brand familiarity did not moderate the impacts of product image on product attitude and purchase intention. These findings suggest that consumer's evaluation of bundling may not be based on prior purchase experiences. When a consumer assesses the bundling, the first step in the process is to evaluate price attractiveness by comparing his or her reference price against bundling.

5. CONCLUSION

We suggest that a consumer's initial perceptions of bundling tend to be related to price and not easily affected by the image of product. Bundling has been considered as one of the effective sales strategy that reduce the original cost. Once a consumer becomes used to paying a monetary value of bundling it is difficult to modify those perceptions. The findings presented in the current study makes several contributions. First, there have only been studies on the effects of bundle framing on consumer behavior, none of which have investigated the effects of product image for bundling in mobile shopping. Our study is one of the first to do so and provides implications related to marketing and consumer behavior research. Second, previous research on bundling has focused on price and monetary value. Considering the increasing trend of mobile shopping, it is critical to investigate the impact of product images on consumer behavior. We focused on the effects of product images on consumer's attitude toward a product and purchase intention, and we extend the research of bundling to the mobile context. Finally, the bundling research has been built on the impacts of sales mechanism on bundling effectiveness and has overlooked context issues. We suggest new insights based on product images and mobile shopping context.

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