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**Co-branding factors influence customer preference towards co-branded products  
impacted by constituent brands**

In Partial Fulfillment of the Requirements  
for the Bachelor of Science in Marketing

by

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May, 2020

## **ABSTRACT**

In order to survive in today's competitive market on a global base, companies are using many strategies to utilize existing investments and capture customer attention by emphasizing brand equity. Among all kinds of choices, the co-branding strategy, a common practice in the brand alliance, is efficient and effective for branding. When there are thousands of choices of co-branded products in the market for customers to choose, companies need to be aware of factors drive some successful co-branded products attractive and retentive. Inspired by this thought, this research is able to figure out brand personality, brand awareness, product fit and brand fit as significant drivers to customer preference towards co-branded products as well as their strength on it. It also constructs regression models for each hypothesis to support creditable interrelations among variables.

**Keywords:** co-branding; customer preference; brand personality; brand awareness; product fit; brand fit; regression model

## TABLE OF CONTENTS

|  |    |    |
|--|----|----|
| Abstract-----  | 1  |    |
| Table of Content-----                                  | 2  |    |
| INTRODUCTION   |    |    |
| 1.1 Introduction-----                                  | 3  |    |
| LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT-----      |    | 4  |
| 2.1 Co-branding Strategy-----                          | 4  |    |
| 2.2 Information Integration Theory-----                | 6  |    |
| 2.3 Antecedents of Information Integration Theory----- | 6  |    |
| 2.4 Conceptual Framework-----                          | 6  |    |
| 2.5 Brand Personality-----                             | 7  |    |
| 2.6 Brand Awareness-----                               | 8  |    |
| 2.7 Product Fit-----                                   | 8  |    |
| 2.8 Brand Fit-----                                     | 9  |    |
| METHODOLOGY-----                                       |    | 10 |
| 3.1 Data Collection and Sample Characteristics -----   | 10 |    |
| 3.2 Reliability Test-----                              | 10 |    |
| 3.3 Correlation Test-----                              | 11 |    |
| 3.4 Statistical Method-----                            | 13 |    |
| RESULTS-----   |    | 14 |
| 4.1 Hypotheses Testing-----                            | 14 |    |
| CONCLUSIONS AND IMPLICATIONS-----                      |    | 16 |
| 5.1 Discussions-----                                   | 16 |    |
| 5.2 Managerial Implications-----                       | 16 |    |
| 5.3 Limitations and Future Research-----               | 16 |    |
| REFERENCES-----  |    | 18 |
| APPENDIX-----  |    | 20 |

# INTRODUCTION

## 1.1 Introduction

In recent years, co-branding has become a prevalent and practicable implementation, which can entail the convincing presentation of a new brand name or the rejuvenation of an existing name. Some co-branding programs are short-term programs like joint promotions, ingredient branding like Intel processor as a supportive part in Dell computer in a way that one brand name joins another as an attribute, creative use of complementary brand equities like Yoplait yogurt owned by General Mills and Sodiaal, and partnership with anonymous supports like Nike+ appliance carries the name Nike but not necessarily its partner's name Apple (Walchli, 2007).

In order to have success, some companies will seek incongruent partners in the market under the theoretical guideline that incongruity among brands counts for valuable and favorable partnerships (Walchli, 2007; Simonin and Ruth, 1998; Ahn and Sung, 2012). The leading brand Coca-Cola in the soft drinks industry is found inviting partners from other fields from time to time. It teams up with Pinko to have Coca-Cola bags, Tezenis to have Coca-Cola underwear, SkinnyDip to have iPhone cases, Ralph Lauren to have Coca-Cola series, Adidas to have Coca-Cola shoes and et al. (Cokestyle, 2016). No matter there are similar or dissimilar partners in the co-branding strategy, some factors like brand awareness (Esch *et al.*, 2009), brand personality (Chang, 2009), product fit (Bouten *et al.*, 2011; Ho *et al.*, 2017; Norman, 2016) and brand fit (Bouten *et al.*, 2011; Ho *et al.*, 2017; Lin, 2013) are vital for managers to forecast a prosperous partnership.

More crucial than partner selection, a key point in business is that customers are the most weighted contributors to sales revenue. Once the company decides to adopt a co-branding strategy for its prospective future, customers will be the ultimate judges to evaluate a valuable implementation and success primarily falls into the scope of customer decisions. It doesn't make sense to predict a big company will be successful as soon as possible or have innocent faith about previous success. The failure in co-branding after decades of success between prominent Danish toy company LEGO and famous Dutch oil company Shell in 2011 has shown bloody truth. In a trendy green peace, the partnership confused the public about the matches between an environment harmful oil company and an educational toy brand (Kosin, 2017). Thus, study in factors that influence customer preference in the case of co-branding is necessary.

Because of advanced technologies, easy accessibility to multiple channels let people consistently expose to various information. In this situation, information overload, information underload, information scatter, information conflict, and erroneous information may occur and cause information chaos (Beasley *et al.*, 2011). With this, the audience will suffer from physical, mental workload and low situation awareness while message senders will suffer from poor information reach. Numerous entities conduct co-branding strategy as a common practice in business through diverse methods, and the competition in gaining customer awareness and preference is fierce. When the message is released and companies expect customers to make a selection from a long list, they need to be aware of factors that lead to their favorable outcomes and make some adjustments.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1 Co-branding Strategy

Generally, co-branding happens in a case that you can find one given product shares more than one brand name (Chiambaretto and Gurau, 2017). There are different forms and levels of co-branding like promotional or sponsorship co-branding in activities, ingredient co-branding in product components, value chain co-branding in a horizontal or vertical alliance, and innovation-based co-branding in the design of totally new products (Nunes *et al.*, 2003). They are also divided into short-term programs with cooperative advertising, joint promotion, use of an established brand name, and long-term plans with ingredient branding or use of complementary brand equities (Walchli, 2007).

In recent years, co-branding strategy becomes a popular technique and some industry like fashion and apparel is believed to make various co-branding alliances. By adopting a co-branding strategy and with successful implementation in practice, managers are able to increase sales revenue, minimum risk of new markets entry, share risks with partners, enhance brand power and improve customer confidence with the product (Doshi. 2007). However, not only the potential benefits but also risks associated with co-branding come with partnerships. Thus, it's reasonable that rather than all couples represented in co-branding get rapturous applause from customers, some of them leave in catcalls such as BenQ with Siemens, Hp with Compaq, and BMW with Range Rover (Chang, 2009). Therefore, in order to demonstrate excellent co-branding performance and win market shares, success factors for direct effects in scenarios of characteristics of constituent brands, characteristics of co-branded product, fit constituent brands, fit constituent brands with co-branded product and person-specific variables are researched and listed in table 1 (Helmig et al., 2008).

Table 1. Success factors for direct effects

| Success Factors for Direct Effects                    | A co-branded product is more successful if ...  | Source   | Relative importance |
|---|---|--|---------------------|
| <i>Characteristics of constituent brands/products</i> |   |  |                     |
| Awareness   | brand awareness of the constituent brands is high.  | Levin et al. (1996)<br>Fang and Mishra (2002)<br>Voss and Tansuhaj (1999)<br>Vaidyanathan and Aggarwal (2000)<br>Desai and Keller (2002)   | Medium              |
| Quality   | the perceived quality of the constituent brands is high.  | Rao et al. (1999)<br>McCarthy and Norris (1999)<br>Park et al. (1996)<br>Simonin and Ruth (1998)<br>Janiszewski and van Osselaer (2000)<br>van Osselaer and Janiszewski (2001)<br>Baumgarth (2003)<br>Lafferty et al. (2004)<br>Huber (2005) | High                |
| Brand equity  | the brand equity of the constituent brands is high.   | Washburn (1999)<br>Washburn et al. (2000; 2004)  | High                |
| <i>Characteristics of co-branded product</i>          |   |  |                     |
| Advertising   | the evaluation of advertising campaigns with regard to the co-branded product is positive.        | Baumgarth (2003)   | High                |
| Retailer acceptance                                   | retailer acceptance is high.  | Völckner and Sattler (2006)  | Not tested yet      |
| <i>Fit constituent brands/products</i>                |   |  |                     |
| Degree of complementariness                           | the constituent brands are highly complementary regarding an attribute of the co-branded product. | Park et al. (1996)   | Medium              |
| Brand fit   | brand fit of the constituent brands is high.  | Simonin and Ruth (1998)<br>Baumgarth (2003)<br>Huber (2005)  | High                |
| Product fit   | product fit of the of the product categories of constituent brands is high.                       | Simonin and Ruth (1998)<br>Baumgarth (2003)<br>Huber (2005)  | High                |
| Incongruence  | partner brands are moderately incongruent under high involvement conditions.                      | Walchi (1996)  | Medium              |
| <i>Fit constituent brands with co-branded product</i> |   |  |                     |
| Fit of constituent brands and co-branded product      | the fit between the brands and the co-branded product is high.                                    | Hadjicharalambous (2001)<br>Baumgarth (2003)   | High                |
| <i>Person-specific variables</i>                      |   |  |                     |
| Product involvement                                   | involvement with the product category of the co-branded product is high.                          | Huber (2005)   | Medium              |
| Brand orientation                                     | brand orientation is high.  | Huber (2005)   | Low                 |
| Constituent brand involvement                         | constituent brand involvement is high.  | Völckner and Sattler (2006)  | Not tested yet      |

Notes: We estimate the relative importance of high, medium, low on the basis of previous findings, because no meta analysis exists.

Source: Co-branding: The state of the art (Helmig *et al.*, 2009)

## **2.2 Information Integration Theory**

Information Integration Theory (IIT) was modeled by social psychologist Norman Henry Anderson with mathematical principles to describe how attitudes formed and changed to influence subjective responses while new pieces of information posed on original thoughts. Anderson (1971) analyzes a persuasive message by firstly measuring its relevant information's value and weight. Value refers to the favorable or unfavorable quality of the information and weight refers to how much the additional information matters to the audience. Besides this, there are three ways new information can integrate with existing ones to affect attitudes: adding, averaging and multiplying. Adding happens when attitudes towards each piece of information are summarized to a final "score". Averaging takes one more step than adding that the final "score" is divided into the total number of information. Compared with these two, multiplying is a more complicated case that simple calculation cannot predict the ultimate results (Anderson, 1971).

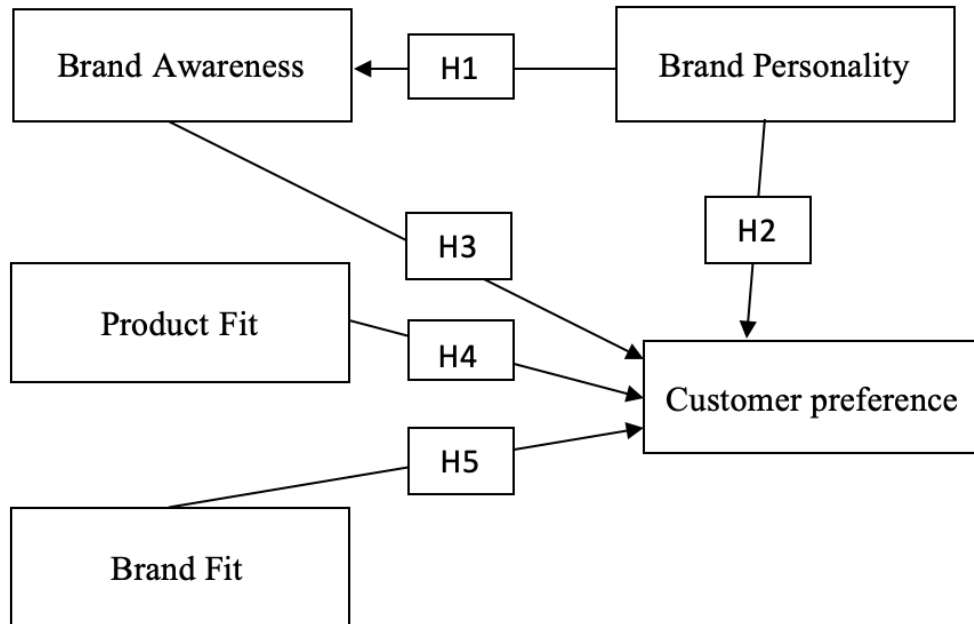
## **2.3 Antecedents of Information Integration Theory**

In psychology, Information Integration Theory (IIT) is widely applied to test the responses in the forms of utilities, preference and difference judgments, or attitudes (Anderson, 1974). It also helps market practitioners to use this model as an additional resource instead of traditional Thurstone and Likert scales explaining primary variables of interest that ultimately encourages customers to form attitudes and behavioral intentions (Cynthia and Thomas, 1980). Specific study of the price and quality information integration to influence expected satisfaction in beef purchase applies IIT to value the effect of missing information in the market (Levin et al., 1984). However, when using IIT to study customers' attitudes, the limitation of humans as information processing systems should be considered for a more in-depth understanding of why many advertising campaigns fail when they communicate a considerable volume of information to consumers (Carlson and White, 2008).

## **2.4 Conceptual Framework**

Concerning the conceptual framework shown in figure 1, it contains five variables (brand awareness, brand personality, product fit, brand fit and customer preference) as well as their relationships. Some variables are extracted from table 1 (success factors for direct effects) (Helmig et al., 2009) and the importance of brand personality in the co-branding strategy is supported by several researchers (Chang, 2009; Khare and Handa, 2009; Wirdamulia and Afiff, 2013).

Figure 1. The conceptual model of the relationship



## 2.5 Brand Personality

Brand personality is derived from human world and applies the set of human personality traits to describe the uniqueness of a specific brand (Aaker, 1997). Aaker (1997) identifies five big categories for brand personality and each personality category contains several traits (figure 2). It's believed that the more consistent and accurate the brand personality connects to human characteristics, the higher the preference towards the brand (Malholtra, 1988). The use of brand personality for positioning in the market is relevant to the frequent use of celebrities. On the one hand, the personalities of stars unconsciously influence consumers' judgement and perceptions about the brand. On the other hand, consumers would like a congruence between themselves and the celebrities so that generate preference to the brand. After all, it's how marketing practitioners give the brand a meaning to let it remain in customers' minds (Azoulay and Kapferer, 2003). Some expected benefits of brand personality are high level of consumer awareness, loyalty, preference and usage (Aaker, 1997). Hence:

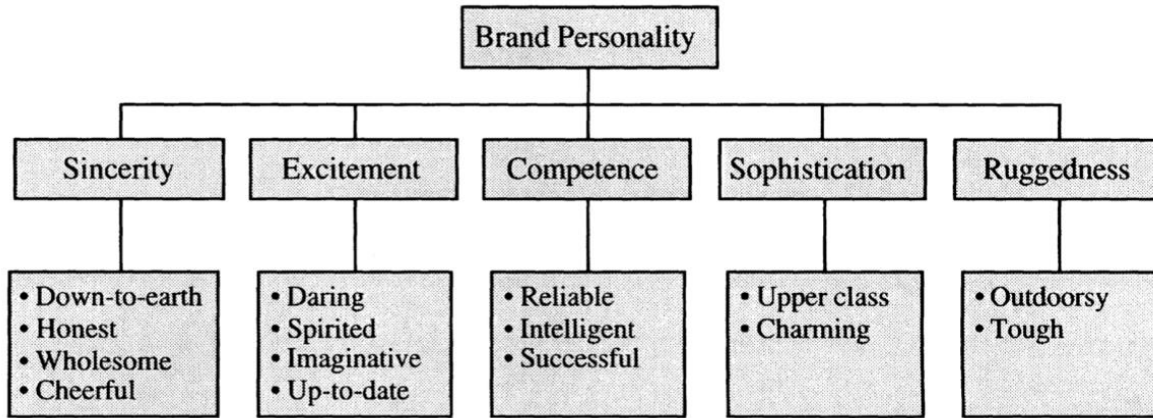
*H1*: Brand personality improves brand awareness.

Compared with the romantic alliances in human world where dissimilarity in psychological variables like personality are significant for valid and reliable relationship (Thiessen and Gregg, 1980; Buss, 1985), an entrepreneur's intention to select a partner will be driven by the dissimilarity in intrinsic functional task considerations (Vissa, 2011). Also, this consideration originates in human alliance theory in which (dis)similarity in personality ratings affects fit measures (Gonzaga *et al.*, 2007). Since brand personality is a vital factor that influence the success of a brand, selecting a partner similar or dissimilar in brand personality is a considerable prerequisite of expected or unexpected outcomes in a co-branding strategy (Dieleman *et al.*, 2014). Hence:



H2: Customer preference towards co-branded products is positively influenced by the dissimilarity of brand personality of constituent brands.

Figure 2. A Brand Personality Framework



Source: Dimensions of Brand Personality (Aaker, 1997)

## 2.6 Brand Awareness

Brand awareness is indicated to be strong if consumers can well recognize and recall the brand under various situations (Keller, 1993). It is critical to predict consumers behavioral intention and identified as a significant driver to brand success for it involves in measuring the brand strength and greatly affect the customer satisfaction, customer relationship and customer repurchase. It's the primary factor in brand assets and investments in brand awareness are essential to build sustainable competitive advantages for company (Aaker, 1991). In a case that managers start viewing foreign market entry choices in a scope of brand alliance, well-known, domestic brands should work efficiently in enhancing consumer evaluations of product's dependability, durability, function, quality, and workmanship (Voss and Tansuhaj, 1999).

Similar to the considerations in foreign brand alliances, in real practice, like the Apple Macintosh logo is witnessed in the movie Mission Impossible, market practitioners tend to use well-known brands as stimulus in the co-branding strategy as well for they are highly recognized and preferred in the market (Grossman, 1997). This kind of tight and powerful relationship with customers is expected to signal positive attitudes toward its co-branding extensions for prior attitudes relate positively to attitudes toward the brand partnership (Simonin and Ruth, 1998). Some other examples are "Sony Ericsson" cellular phones, "Fila-Ferrari" shoes, and "Citibank-American Airlines" credit cards in a case that partner selection bases on high brand awareness mutually (Esch et al., 2009). Hence:

H3: Customer preference towards co-branded products is positively influenced by the degree of brand awareness of constituent brands.

## 2.7 Product Fit

Product fit is noted in Simonin and Ruth's (1998) study as consumers' perception of compatibility of two or more product categories. It is one of the significant determinants towards consumers' response to brand alliances. In the case of high-tech luxury co-branded products

launched in the market such as Samsung Armani cell phone, LG Prada cell phone, Asus Lamborghini laptop and Segway Chanel personal transporters, product fit drives consumer behaviors through affect and cognition (Ho et al., 2017). Accordingly, the product fit is indicated to positively work on consumer attitudes towards brands alliance that better product fit makes the co-branding strategy more powerful (Simon and Ruth, 1998). Specifically, Norman (2016) explains in his research that product fit represents the relevancy of co-branding components and higher level of product fit will give customers greater recall towards the co-branded products. Hence:

*H4: Customer preference towards co-branded products is positively influenced by the degree of product fit of constituent brands.*

## **2.8 Brand Fit**

Similar to product fit, brand fit is another concept which holds a high frequency in marketing research to explain consumer attitudes towards co-branding. Expected to be more advanced and complicated, brand fit is observed from attribute interrelations, beliefs and emotions (Wason and Charlton, 2015). In details, Wason and Charlton (2015) view the significance of brand fit in the scope of brand name, brand attractiveness and country of origin. These categories aim to fulfill customers' needs of self-expression and prestige so that to manipulate consumer emotional preferences. It applies to the interaction of brand images and inconsistency will cause suspicious revision to the brand alliance. In other words, poor brand fit encourages undesirable judgements (Simon and Ruth, 1998). Hence:

*H5: Customer preference towards co-branded products is positively influenced by the degree of brand fit of constituent brands.*

## METHODOLOGY

### 3.1 Data Collection and Sample Characteristics

In a case that everyone in marketing is valid message receiver in terms of easy accessibility and quick spread of information, the demographic difference among respondents in China are not emphasized so that only basic categories in gender and age need clarifications. By posting the questionnaire online in Wenjuanxin mutual community, Wechat and Tencent QQ, an extracted sample with 72 respondents in all from national wide is analyzed. Table 2 represents two parts of demographic information about these 72 participants. According to the processed date, the sample displays noteworthy characteristics that a majority of individuals are female (with the percentage of 66.67%) and those aged from 21 to 40 years old (with the percentage of 73.61%).

Table 2. Demographic information of the respondents (%)

| Items  | Characteristics in %                        |
|--------|---|
| Gender | Male: 33.33%<br>Female: 66.67%              |
| Age    | 0-20: 19.44%<br>21-40: 73.61%<br>40+: 6.94% |

### 3.2 Reliability Test

Except the profile part, the rest of questionnaire uses 5-point Likert scales to test respondents' attitudes towards five components: brand awareness, brand personality, product fit, brand fit and customer preference. Each of these five variables derives five items and the reliability test using Cronbach's Alpha (CA) is shown in table 3. CA with values from 0 to 1 represents the internal consistency, that is, how reliable a set of items is believed be a group. The closer CA is to 1, the better reliability it indicates. Generally, as long as the result is greater than the threshold value 0.7, the reliability is acceptable or even "good" if it's greater than 0.8, "excellent" if it's greater than 0.9 (Nunnally and Bernstein, 1994).

Table 2 shows CA in this research ranges from 0.873 to 0.714 with all values greater than the cutoff 0.7. In details, 0.873 for brand awareness, 0.826 for product fit and 0.843 for customer preference denote good internal consistency in these three groups; 0.714 for brand personality and 0.775 for brand fit express acceptable reliabilities within these two groups.

Table 3. Reliability of constructive measurements

| <b>Variables</b>    | <b>Cronbach's Alpha</b> | <b>Cronbach's Alpha Based on Standardized Items</b> | <b>N of Items</b> |
|---------------------|-------------------------|---|-------------------|
| Brand Awareness     | 0.873                   | 0.874   | 5                 |
| Brand Personality   | 0.714                   | 0.724   | 5                 |
| Product Fit         | 0.826                   | 0.826   | 5                 |
| Brand fit           | 0.775                   | 0.777   | 5                 |
| Customer Preference | 0.843                   | 0.846   | 5                 |

### 3.3 Correlation Test

A correlation matrix table is processed and exhibited as table 4 to test the relationships between variables by adopting Pearson's Correlation method. As noted in the table, each item runs p-value less than 0.01 level so that there is high intergroup relevance. Compared this table to the widely accepted correlation strength standard which suggest 0.00-0.19 refers to "very weak", 0.20-0.39 refers to "weak", 0.40-0.59 refers to "moderate", 0.60-0.79 refers to "strong" and 0.80-1.00 refers to "very strong" (Evans, 1996), the predicted relationship between brand personality and brand awareness shows moderate positive correlation among these two variables (0.528).

The correlation strength values also signal customer preference variable maintain expected positive relationships with other four variables. Among them, the highest value 0.619 generated describe a strong interrelation between brand personality and customer preference while numbers 0.545, 0.472 and 0.464 only indicate moderate interrelation between customer preference and brand awareness, product fit and brand fit respectively. Other noticeable results are the lowest value 0.367 for weak relevance between brand personality and brand fit and high value 0.608 for strong relevance between product fit and brand fit.

Table 4. Correlation Matrix

**CORRELATION MATRIX**

| <b>Construct Variables</b> | <b>Mean</b> | <b>Variance</b> | <b>(1)</b> | <b>(2)</b> | <b>(3)</b> | <b>(4)</b> | <b>(5)</b> |
|----------------------------|-------------|-----------------|------------|------------|------------|------------|------------|
| Brand Awareness            | (1) 3.479   | 0.028           | 1.000      |            |            |            |            |
|                            | Sig.        |                 | -          |            |            |            |            |
| Brand Personality          | (2) 3.950   | 0.054           | 0.528      | 1.000      |            |            |            |
|                            | Sig.        |                 | 0.000      | -          |            |            |            |
| Product Fit                | (3) 3.719   | 0.027           | 0.532      | 0.491      | 1.000      |            |            |
|                            | Sig.        |                 | 0.000      | 0.000      | -          |            |            |
| Brand Fit                  | (4) 3.603   | 0.018           | 0.592      | 0.367      | 0.608      | 1.000      |            |
|                            | Sig.        |                 | 0.000      | 0.002      | 0.000      | -          |            |
| Customer Preference        | (5) 3.806   | 0.029           | 0.545      | 0.619      | 0.472      | 0.464      | 1.000      |
|                            | Sig.        |                 | 0.000      | 0.000      | 0.000      | 0.000      | 0.000      |

\*\*Pearson Correlation method is used for this test. All the significant is at the 0.01 level (2-tailed).

### **3.4 Statistical Method**

Statistical Package for the Social Science (SPSS) software programmed by International Business Machines (IBM) company is used to analyze raw data collected from online questionnaires. It is a convenient tool for reliability test, correlation test and regression model construction. The reliability test measures the internal consistency by using Cronbach's Alpha which is a generalized version from Kuder-Richardson Formula 20 and seen as the mean of all possible split-half coefficients (Cortina, 1993). Pearson Correlation Coefficient developed by Karl Pearson is applied to test the linear correlation by using sample means of each variable. Several regression models will also be concluded in later hypotheses test to investigate predictive relationships between assigned dependent variable and independent variables.

## RESULTS

### 4.1 Hypotheses Testing

There are five hypotheses developed and exhibited after each section of literature review. In a purpose of constructing mathematical equations to prove the relationships between each two variables, regression models ( $y = b + ax$ ) are completed base on SPSS analysis. For the first hypothesis predicting the relevance between brand personality and brand awareness, the SPSS table (table 5) shows p-value ( $0.000 < 0.01$ ) so that the result is significant and H1 is accepted. The regression model with dependent variable brand awareness and independent variable brand personality is as follows:

$$\mathbf{BR = 0.714 + 0.705 BP}$$

Table 5. Coefficients

| Model               | Unstandardized Coefficients |            | Standardized Coefficients |       | Sig.        |
|---------------------|-----------------------------|------------|---------------------------|-------|-------------|
|                     | B                           | Std. Error | Beta                      | t     |             |
| <b>1 (Constant)</b> | .714                        | .541       |                           | 1.320 | .191        |
| <b>BPmean</b>       | .705                        | .136       | .528                      | 5.199 | <b>.000</b> |

a. **Dependent Variable: BRmean (BP=Brand Personality; BR=Brand Awareness)**

Different from H1, all other hypotheses investigate the interrelations between various variables and solid customer preference. P-values highlighted in table 6 for these hypotheses are less than 0.01 level (all are 0.000) which suggest significance for all and acceptance to initial assumptions. Accordingly, some regression models are developed as follows that show impacts of different independent variables on customer preference:

$$\mathbf{CP = 0.819 + 0.738 BP}$$

$$\mathbf{CP = 2.103 + 0.487 BR}$$

$$\mathbf{CP = 1.893 + 0.514 PF}$$

$$\mathbf{CP = 1.932 + 0.520 BF}$$

Therefore, all hypotheses we developed in this research carry same low p-values 0.000 and are significant in 0.01 level. Table 7 gives the overview of all hypotheses and their situations.

Table 6. Composite Coefficients

| Model               | Unstandardized Coefficients |            | Standardized Coefficients |       | Sig.        |
|---------------------|-----------------------------|------------|---------------------------|-------|-------------|
|                     | B                           | Std. Error | Beta                      | t     |             |
| <b>2 (Constant)</b> | .819                        | .447       |                           | 1.991 | .050        |
| <b>BPmean</b>       | .738                        | .112       | .619                      | 6.586 | <b>.000</b> |
| <b>3 (Constant)</b> | 2.103                       | .321       |                           | 6.558 | .000        |
| <b>BRmean</b>       | .487                        | .090       | .545                      | 5.433 | <b>.000</b> |
| <b>4 (Constant)</b> | 1.893                       | .433       |                           | 4.371 | .000        |
| <b>PFmean</b>       | .514                        | .115       | .472                      | 4.480 | <b>.000</b> |
| <b>5 (Constant)</b> | 1.932                       | .433       |                           | 4.458 | .000        |
| <b>BFmean</b>       | .520                        | .119       | .464                      | 4.386 | <b>.000</b> |

a. **Dependent Variable: CPmean (BP=Brand Personality; BR=Brand Awareness; PF=Product Fit; BF=Brand Fit; CP=Customer Preference)**

Table 7. Hypotheses testing

| No.                               | Hypothesis  | Results |
|-----------------------------------|---|---------|
| 1                                 | Brand personality improves brand awareness.   | S       |
| 2                                 | Customer preference towards co-branded products is positively influenced by the dissimilarity of brand personality of constituent brands. | S       |
| 3                                 | Customer preference towards co-branded products is positively influenced by the degree of brand awareness of constituent brands.          | S       |
| 4                                 | Customer preference towards co-branded products is positively influenced by the degree of brand fit of constituent brands.                | S       |
| 5                                 | Customer preference towards co-branded products is positively influenced by the degree of brand fit of constituent brands.                | S       |
| Notes: S = Supported; R = Refuted |   |         |



## **CONCLUSIONS AND IMPLICATIONS**

### **5.1 Discussions**

The initial purpose of this research project is to test some assumed relationships between factor drivers and target object customer preference towards co-branded products in a case of co-branding strategy applied. After programming the reliability test, correlation test, and regression model construction in SPSS software, the significance of brand personality, brand awareness, product fit and brand fit to customer preference is verified according to p-values. The hypothesis for the relevance between brand personality and brand awareness is also proved. Conclusive p-values of all hypothesis represent the same amount 0.000 so that acceptance of previous assumptions is brought to pass in the 0.01 level. The most impactful component refers to brand personality with reviews in correlation test and regression models. As the hypothesis goes, the dissimilarity in brand personality of constituent brands is positively related to customer preference. This is an expected outcome in a scenario that possible emotional closeness with customers can be reached by comparing the partnership to human alliance. At the same time, brand personality also contributes to brand awareness in a way that brand personality germinates higher brand awareness. The higher the brand awareness of constituent brands is, the greater customer preference is supposed to be. It's the same for the degree of product fit and brand fit of constituent brands.

### **5.2 Managerial Implication**

If managers decide to apply the co-branding strategy after a short while and are looking for good partners, the relationships exhibited in this paper between customer preference and factors can be helpful for partner assessment and performance forecast. It's also believed that when some managers are dealing with unsatisfying partnership and disappointed with the consequences, this study primarily provide some suggestion for some practicable adjustments to attract customers as well. Another situation could be managers are inspired by powerful competitors and want some improvements in their own co-branding strategy, this work is supportive in giving some clues about how to make the co-branded work more favorable. It can also be implicated in the worst circumstance that co-branding strategy failed to generate customer attention and more profits for company. When managers are skeptical about customer attitudes, this research can remind them to look at specific aspect.

### **5.3 Limitation and Future Research**

Limitations of this study are perceived in four aspects. First, generalization of customers may influence the accuracy of results. Different groups of individuals under the segmentation in social status, demographic traits, educational level and cultural background may have different ideas about a same concept. Second, only a small sample is investigated and used to test the hypotheses. If there are more responses, the results will be more persuasive and applicable. Third, a higher weight in female and people aged 21-40 is observed. Third, the situation of co-branding strategy such as whether it's a long-term or short-term program is not considered. Customer preference may be achieved in a nature of effective co-branding design. Fourth, only four factors are studied while other elements like brand image, brand loyalty and perceived quality can pose a great influence on customer preference. In this case, future research can focus on a real co-branding case and its success. By this way, the targeted sample can be the users of the co-branded products or services and it will be easier to find out why they make the purchase. Then, factors connected to this co-branding form can be estimated appropriately for customer preference.

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## APPENDIX

### Questionnaire

#### Part 1 Profile

1. What's your gender?
  - a) Female
  - b) Male
2. What's your age?
  - a) 0~19
  - b) 20~40
  - c) 40+

#### Part 2 Variables

The following 25 questions use Likert scale to test your understandings of some variables. 1 represents very disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents very agree

| <b>A. Brand awareness</b>  | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| I know the product very well   |   |   |   |   |   |
| I can recall the product under various situations                      |   |   |   |   |   |
| I remember some attributes of that specific product                    |   |   |   |   |   |
| I can describe the product   |   |   |   |   |   |
| I can picture the product with little information                      |   |   |   |   |   |
| <b>B. Brand personality</b>  |   |   |   |   |   |
| Brands have their own personalities                                    |   |   |   |   |   |
| One specific personality trait is used to describe only limited brands |   |   |   |   |   |
| One brand can have personality traits which other brands don't have    |   |   |   |   |   |
| There is difference in brand personality among brands                  |   |   |   |   |   |
| It's difficult to find brands with total the same personality traits   |   |   |   |   |   |
| <b>C. Product fit</b>  |   |   |   |   |   |
| I think co-branded products are a reasonable product combination       |   |   |   |   |   |
| I think co-branded products are a logical product combination          |   |   |   |   |   |
| I think co-branded products are a complementary product combination    |   |   |   |   |   |
| I think co-branded products are an acceptable product combination      |   |   |   |   |   |
| I think co-branded products are an appropriate product combination     |   |   |   |   |   |

| <b>D. Brand fit</b>  | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| The images or associations that you might have for the brands participated in co-branding are consistent |   |   |   |   |   |
| The images or associations that you might have for the brands participated in co-branding are connected  |   |   |   |   |   |
| The images or associations that you might have for the brands participated in co-branding are compatible |   |   |   |   |   |
| The images or associations that you might have for the brands participated in co-branding are expected   |   |   |   |   |   |
| The images or associations that you might have for the brands participated in co-branding are accordant  |   |   |   |   |   |
| <b>E. Customer Preference</b>  |   |   |   |   |   |
| Even two brands have the same features, I will have different preference towards these two brands        |   |   |   |   |   |
| It makes sense to buy a specific brand instead of others   |   |   |   |   |   |
| I will not buy other brands if a specific brand is available   |   |   |   |   |   |
| My first choice will be some specific brands   |   |   |   |   |   |
| I have better experience with specific brands  |   |   |   |   |   |