

Research on Co-branding Market Competition Strategy Based on Consumer's Evaluation*

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Abstract—Based on the characteristics of low investment and quick effect, co-branding has been widely applied in the marketing circle, but it still faces enormous challenges. The traditional joint model with high asset and low popularity cannot keep pace with the increasingly diversified social environment. The two parties of the co-branding need to transform and upgrade the traditional brand association, stabilize the combination of high-asset brands and low-popularity brands, improve consumer's evaluation, and expand the influence of the association.

Keywords—co-branding; consumer's evaluation; influence

I. INTRODUCTION

Based on the characteristics of low investment and quick effect, co-brand has been widely applied in the marketing circle. Co-branding refers to a short-term or long-term cooperation conducted between two or more brands belonging to different enterprises for the purpose of increasing assets and enhancing their competitiveness. [4] Studies have shown that when corporate assets cannot be quickly increased, cooperation with other brands will be able to bring positive marketing effects (Blackett and Boad, 1999); and the bonding between unknown brands and high-asset brands in the co-branding can absorb each others' customer resources and further effectively enhance the corporate's status and brand equity (Washburn et al., 2004, Gammoh et al., 2006).

Based on the effects produced by co-branding, domestic and foreign scholars have already obtained a very mature theoretical framework for this business model; they mainly concentrate in the effects produced by co-branding to explore whether consumers are positive to give market response to the new products or services created by the parties of the co-branding. Scholars have reached a consensus on whether brand associations can increase brand equity, but fail to reach a consensus on the contribution of unnamed brands and high-asset brands to the evaluation of co-branding consumers. Simonin pointed out that although high-asset brands occupy

an absolutely high position in the contribution of co-branding's consumer evaluation, their spillover effects are relatively small, and the unknown brands are just the opposite. However, over empirical researches, Washburn Priluck et al. concluded that both high and low assets can obtain positive effect in the process of cooperation with other brand elements.

Based on the research contributions of Chinese and foreign scholars, it is not difficult to find that most of the researches are concentrated between high-asset brands and low-fame brands. How to maximize the co-branding effect at present will be further discussed in this paper.

II. THEORETICAL BACKGROUND, RESEARCH MODEL AND HYPOTHESIS

A. Co-branding and Its Consumer Evaluation

Co-branding refers to a short-term or long-term cooperation conducted between two or more brands that belong to different enterprises for the purpose of increasing assets and enhancing their competitiveness [4]. Studies have shown that after adding in high-asset brands, the premium generated by unnamed brand is significantly higher than that of high-asset brands. In the process of co-branding, customers may produce quality assimilation psychology, and believe that unnamed brands and high-asset brands have the same attributes and quality, so the purchasing willingness is also significantly improved than that before the co-branding, and the perceived risk at the time of purchase will also be greatly reduced (Levin I., Levin A., Rao and Ruekert); however, consumers' negative experiences with unknown brands will also be shifted to high-asset brands, which will endanger the market position of high-asset brands (Farquhar, 1994).

B. Co-branding Effect

Co-branding effect is a result of comparison between consumer's impression on the series of evaluation on the co-brand and the evaluation on individual brand before co-branding. Numerous studies have shown that co-branding may enable consumers to have a friendly attitude towards co-brand and drive the demand for the consumption chain; the evaluation on consumers of co-brand will outpace the unnamed partner brands; but it will never be better than the

*Fund: The "13th Five-year" Social Science Research Program of the Jilin Provincial Department of Education — "Study on the Construction of an Industry-University-Research System of "two drivers, three promoters, three innovation and integration" Mode for the Innovation and Entrepreneurship Education in Colleges and Universities" (Project No.: JJKH20190428JY)

cooperated high-asset brands (Washburn et al., 2000; Aggarwal; Priluck, 2004). Therefore, under the co-branding model between high-asset brands and low-asset brands, this paper proposes the following hypothesis:

H1: Based on the co-branding, when the purchasing power is general, consumers' overall perception on the co-brand often lies between the two brands.

H1a: Based on the co-branding, when the purchasing power is general, consumers' evaluation on the quality of the co-brand often lies between the two brands.

H1b: Based on the co-branding, when the purchasing power is general, consumers' willingness to purchase the co-brand often lies between two brands.

As mentioned above, co-branding effect mainly reflects the result of consumers' comparison on the evaluation on the cooperated products and single brand of products before and after the co-branding, namely the asset spillover status. Washburn believes that co-branding of any brands can benefit themselves regardless of its asset status; and Simonin believes that in terms of consumers' evaluation, high-asset brands contribute relatively more to cooperated products, but less to their own improvement, while unknown brand are just the opposite. [10] Accordingly, this paper proposes the following hypothesis:

H2: Based on co-branding, both parties of the cooperation can obtain positive spillover effects.

H2a: Based on co-branding, consumers' quality perceptions on products of both partners have been improved.

H2b: Based on co-branding, consumers have increased their willingness to purchase products from both parties of the cooperation.

III. RESEARCH METHODS

A. Questionnaire Design

In the selection of stimulants, this paper specifically selected the familiar Lamborghini car brand and OPPO mobile phone brand. It is known that Lamborghini and OPPO launched a co-branding last year, and launched OPPO Find X mobile phone of Lamborghini limited edition. Lamborghini and OPPO are brands well-known to the public. The existing true cooperation cases and the survey samples of the two parties do not know about this cooperation. Therefore, the co-branding can quickly stimulate consumers' associations and facilitate making researches on the factors affecting the co-branding.

As an internationally renowned sports car brand, Lamborghini represents the high-asset brands, while OPPO mobile phone has relatively low popularity in the industry and represents the low-asset brands. The questionnaire should first test the participants' evaluation on the two brands before being told the co-branding mode, then test the participants' evaluation on the co-brand and the two brands after being told the co-branding mode, and finally obtain individual information of the participants.

B. Data Collection and Variable Determination

The questionnaire was randomly distributed by using the "Questionnaire Star" research software. Those questionnaires (150 copies) were collected through the Internet of Things and were all valid. The final sample characteristics are as follows ("Table I"):

TABLE I. ANALYSIS OF BASIC DISTRIBUTION OF SAMPLES

Classification	Characteristics	Number of samples	Percentage, %
Sex	Male	86	57.38%
	Female	64	42.62%
Age	18-25 years old	86	57.38%
	26-30 years old	20	13.11%
	31-40 years old	32	21.31%
	More than 41 years old	12	8.20%
Academic background	not superior to senior high school level	15	9.84%
	Junior college education level	17	11.48%
	Undergraduate	79	52.56%
	not inferior to postgraduate level	39	26.23%
Occupation	Employee in enterprise	54	36.07%
	Worker in public institution	17	11.48%
	Freelancer	30	19.68%
	Student	49	32.79%
Personal monthly income	Less than 3000	61	40.99%
	3000-4500	20	13.11%
	4501-6000	22	14.75%
	More than 6000	47	31.14%

On the whole, most of the samples are highly educated youth. The distribution of the results is basically consistent with the structural characteristics of the consumer groups in

the mobile phone market. Young people are more capable of accepting new things. The highly educated people are very

helpful to the conduction of this complex two-dimensional questionnaire survey.

This questionnaire adopts multi-item measurement method to measure the relevant variables in the model. Consumers' quality perception and purchase willingness on the product are selected to measure consumers' evaluation on the co-brand and the brands before and after co-branding. Consumers are measured by the items about the product "high quality; strong sense of technology; the producer can be trusted; like it more by comparison; may choose if purchasing". The complementarity between the co-branded

product and the brands is measured by the "technical complementarity and brand coordination". [5] All items are in a five-point scale.

IV. DATA ANALYSIS RESULT

A. Reliability and Validity Analysis

To verify the reliability of the measurement of relevant variables, a Cronbach 'α test was performed. The results ("Table II") showed that Cronbach'α exceeded 0.70, indicating that the correlation variables have good reliability.

TABLE II. TEST RESULTS OF THE RELIABILITY AND VALIDITY OF VARIABLE MEASUREMENTS

Variable	Quantity of measuring items	Factor load	Value t	Average	Standard deviation
Evaluation on O before co-branding (α=.927)	OPPO has high quality	.888	32.98	3.26	.772
	OPPO has strong sense of technology	.884	30.55	3.25	.83
	the producer of OPPO is trustworthy	.897	34.86	3.3	.738
	Compared with other brands, OPPO enjoys more popularity	.920	27.07	3.03	.875
	OPPO will be selected in needed of purchasing a mobile phone	.862	20.21	2.9	1.121
Evaluation on L before co-branding (α=.797)	Lamborghini has high quality	.927	54.57	4.2	.601
	Lamborghini has strong sense of technology	.965	52.71	4.18	.619
	the producer of Lamborghini is trustworthy	.890	50.14	4.2	.654
	Compared with other brands, Lamborghini enjoys more popularity	.740	37.07	3.89	.819
	Lamborghini will be selected in needed of purchasing a car	.346	25.05	3.23	1.007
Evaluation on the co-brand FX (α=.925)	FX has high quality	.886	35.48	3.72	.819
	FX has strong sense of technology	.890	38.67	3.77	.761
	the producer of FX is trustworthy	.903	37.40	3.62	.756
	Compared with other brands, FX enjoys more popularity	.858	35.68	3.64	.797
	FX will be selected in needed of purchasing a mobile phone	.856	30.87	3.51	.887
Perception on the matching property of the co-branding (α=.929)	In this co-branding, OPPO and Lamborghini are coordinated with each other very well	.967	33.23	3.72	.968
	OPPO and Lamborghini are complementary to each other in technical performance	.967	34.51	3.69	.904
Evaluation on O after co-branding (α=.960)	OPPO has high quality	.922	32.12	3.7	.901
	OPPO has strong sense of technology	.932	33.23	3.69	.867
	the producer of OPPO is trustworthy	.956	34.51	3.75	.85
	Compared with other brands, OPPO enjoys more popularity	.903	29.17	3.57	.957
	OPPO will be selected in needed of purchasing a mobile phone	.938	26.88	3.48	1.01
Evaluation on L after co-branding (α=.900)	Lamborghini has high quality	.949	32.28	4.13	.866
	Lamborghini has strong sense of technology	.946	39.49	4.18	.827
	the producer of Lamborghini is trustworthy	.959	38.89	4.15	.833
	Compared with other brands, Lamborghini enjoys more popularity	.725	34.20	3.95	.902
	Lamborghini will be selected in needed of purchasing a car	.251	28.18	3.36	.932

Over a confirmatory factor analysis on the measurement model, the convergent validity measured by the variable is obtained. The result ("Table I") shows that the factor load coefficients of all measurement items are more than 0.50,

indicating that the convergent validity of relevant variable is good.

TABLE III. DESCRIPTIVE STATISTICS ON MAIN VARIABLES

Variable	Average	Standard deviation	Value F	sig
Evaluation on O before co-branding	3.15	0.77	8.26	0.00
Evaluation on L before co-branding	3.94	0.56	33.29	0.00
Evaluation on the co-brand Find	3.65	0.7	3.287	0.00
Perception on the matching property of the co-branding	1.48	0.36	0.282	0.597
Evaluation on O after co-branding	3.64	0.85	5.296	0.00
Evaluation on L after co-branding	3.95	0.738	26.503	0.00

Over a descriptive statistical analysis on the main variables as shown in "Table III", it is found that the value F of each variable is greater than 0.05, the value p is less than 0.05; different group has significant difference; relevant variable has good distinctive validity.

B. Brand Control Test

In order to ensure that the brand differences in the study are successful, this paper conducts a control test on Lamborghini's popularity and OPPO's visibility. The test result showed that the participants' familiarity (F1=33.29) to Lamborghini before co-branding was significantly higher than that to OPPO (F2=8.26); after co-branding, it was also higher than that of OPPO (F1'=26.503, F2'=5.296). Hence, the brand control on the tested stimulants used in this paper is successful.

C. Hypothesis Test

H1: Based on the co-branding, when purchasing power is general, consumers' overall perception on the co-brand often lies between the two brands. As can be seen from "Table II",

the average value of the co-brand OPPO Find X Lamborghini limited edition of mobile phone is 3.65, which is just between the brand evaluations on the two brands after the co-branding, which confirms the rationality of H1. Over a two-dimensional analysis on the questionnaire, it is known that in aspect of perceived quality, consumers' perception on the quality of Find X lies between that of OPPO mobile phone and Lamborghini, hence H1a is confirmed; consumers' willingness to purchase Find X series is slightly higher than that of Lamborghini, but compared with the OPPO native series, the willingness is still insufficient. According to this case, an interview was made. The result shows that the main reason is that Lamborghini as a sports car is not in daily use; meanwhile, the Find X series is priced at 9999. For most samples, the price is too high and not practical. Although consumers prefer it, the purchase willingness is not significant, so H1b is not confirmed.

TABLE IV. DESCRIPTIVE STATISTICS ON TWO-DIMENSIONAL VARIABLES

Variable	Quantity of measuring items	Factor load	Value t	Average	Standard deviation
Evaluation on O before co-branding (a=.927)	Quality perception	0.89	32.8	3.27	0.72
	Purchase willingness	0.89	23.64	2.96	1
Evaluation on L before co-branding (a=.797)	Quality perception	0.927	52.47	4.19	0.62
	Purchase willingness	0.54	31.06	3.56	0.913
Evaluation on O after co-branding (a=.960)	Quality perception	0.93	33.29	3.71	0.87
	Purchase willingness	0.92	28.02	3.52	0.98
Evaluation on L after co-branding (a=.900)	Quality perception	0.95	36.89	4.15	0.84
	Purchase willingness	0.49	31.19	3.66	0.917

H2: given that high-asset brand cooperates with low-popularity brand when consumers' purchasing power is general, both parties can get spillover effect. According to the comparison of the results before and after co-branding as shown in "Table II", it is known that consumers' evaluations on both Lamborghini and OPPO are improved; and the difference between the averages of consumers' evaluations on OPPO before and after co-branding is large, while that on Lamborghini is small; hence, H2 is confirmed. Over a two-

dimensional analysis on the questionnaire, it is known that in aspect of consumers' quality perception and purchase willingness, OPPO is obviously improved, while the purchase willingness of consumers of Lamborghini is slightly reduced; hence, H2 is confirmed and H2b is not confirmed.

Above all, the results of the hypothesis tests in this study are shown as follows ("Table V"):

TABLE V. RELEVANT HYPOTHESIS AND RESULT

Hypothesis	Hypothesis description	Result
H1	Consumers' evaluation on the co-brand is higher than that on low-popularity brands, but will not exceed that on high-asset brands	Significant
H1a	Consumers will have greater trust in the quality of co-brand, but will not exceed that of high-asset brands	Significant
H1b	Consumers are more willing to buy products of co-brand, compared with high-asset brands and low-popularity brands	Not significant
H2	When high-asset brand cooperates with low-popularity brand, both parties can get spillover effect.	Significant
H2a	Based on co-branding, consumers' quality perceptions on products of both partners have been improved.	Significant
H2b	Based on co-branding, consumers have increased their willingness to purchase products from both parties of the cooperation.	Not significant

V. THEORETIC CONTRIBUTIONS AND MANAGEMENT SUGGESTIONS

A. Making Clear the Brand Positioning, and Selecting the Cooperation Partner

The key to the better economic gains from this co-branding of OPPO and Lamborghini is the clear positioning of their images. Although OPPO's brand assets are general, it determines that its target market is young people, and it is fully aware of the importance of freshness; hence, it selects to cooperate with such a hot-topic, high-popularity and high-asset brand as Lamborghini cooperation. Ordinary mobile phone combined with the top sports cars looks like a crazy combination, but it is properly in line with the current consumption mentality of contemporary young people hunting and chasing the trends.

Therefore, if a company wants to broaden its market and transform its brand image, it must make clear its positioning, seek for suitable partners, and ensure getting its loss reduced to the minimum if the co-branding fails.

B. Dynamically Developing the Brand and Maximizing the Co-branding Effect

Over this study, it is found that the co-branding effect is affected by factors such as popularity, correlation matching and co-branded product price. The co-branding must ensure that the traditional negative images of the two brands can be

changed under a good market strategy, bringing positive market effect.

At the same time, taking advantage of being protected by the main brand asset, the weak brand under the co-brand can strive to enrich its connotation, highlight the uniqueness of the enterprise by giving the brand a broader and richer meaning, protect the company's own brand from being interfered by the main brand, and lay a solid foundation for the influence of the co-brand provided that the original industrial ecosystem is undermined.

C. Building a Cooperative Development Platform

In the Internet era, more and more offline brands have jumped away from traditional industries, added Internet business, and formed a new model of "Internet +" or "+ Internet". Because traditional companies and Internet companies have obvious difference, the resources are more complementary and less prone to producing conflicts. Internet companies use their offline reputation to promote their brands, while traditional companies use the platform of Internet companies to engage in advertising implantation or virtual experience interaction.

On the network platform built up by co-branding, enterprise exists in fragmented form. Such co-branding can provide corresponding services to consumers having different needs, save transaction costs and improve social

transaction efficiency. Similarly, the stability of the co-brand is also guaranteed accordingly.

The original intention of the Internet Alliance is to collect multiple online partners to form a platform community and share user resources. Co-brand can build a brand community on the Internet platform, which is conducive to enhancing the emotional connection between consumers and the brand and strengthening the exchange of complementary resources between enterprises and the communication between corporate members. Such an online co-branding model can aggregate similar target users and meet a variety of different needs. While expanding the influence of the entire alliance, individuals can also have more user groups and shared resources. Judging from the survey on the participants, most of them expressed that they are unfamiliar with and lack of understanding of the co-branding of OPPO and Lamborghini. The reason is largely related to OPPO's marketing model at this time. The Find X series is very expensive, and the products are mainly targeted at young people who love sports cars. It is not mainly advocated by OPPO but only issued on the official website for booking. Although it is a mid and high-end product, its popularity is not as high as it is supposed to be. This is mainly because OPPO does not make good use of Lamborghini's fame to popularize the Internet community and the consumer groups are scattered.

As the member companies have different service items, there will be no competition and the greatest benefits can be achieved. The establishment of online communities does not mean that communication ends with the Internet. Instead, it can use the powerful user relationships brought by the Internet to transform this relationship into an offline interactive experience, and take advantage of the powerful influence and fame of traditional enterprises in the real world to realize a true O2O marketing.

VI. CONCLUSION

On the basis of previous researches, this paper studies the consumers' attitude towards co-branding, and reflects the important strategies of brand to establish the market in the era according to the evaluation of consumers. The association between brands must conform to the trend of the times within the acceptable range of consumers, stimulate consumers' interest, and meet consumers' spiritual needs to a certain extent. However, due to the lack of extensive market research scope and the concentration of research objects, and because the mobile phone market cannot represent other commodity markets, the co-branding research on consumer evaluation is not perfect and there are still many problems to be solved.

REFERENCES

- [1] Wang Kun. Cloud Trust Data Recommendation Algorithm Based on Multi-agent Negotiation Frequency Analysis [J]. Bulletin of Science and Technology, 2015(8). (in Chinese)
- [2] Chen Feiqiong, Fan Liangcong. Analysis on the Stability of Strategic Alliance Based on Cooperation and Competition [J]. Management World, 2007(7): 102 -110. (in Chinese)
- [3] Gao Hongwei. Research on Improving the Effect of Newly-created Enterprise Brand [J]. Economic Research Guide, 2018. (in Chinese)
- [4] Lu Juan, Bian Yajing. A Study on the Effect of the Alliance of the Host Brands in the Context of the Model of the Alliance of Different Brands [J]. Management World, 2010. (in Chinese)
- [5] Lu Juan, Wu Fang. Brand Association Research: Overview and Conception [J]. Journal of Business Economics, 2009. (in Chinese)
- [6] Wang Xiuying. About Power Source of the Brand Equity and the Brand Value [J]. China Business and Market. 2008. (in Chinese)
- [7] Ning Changhui. Research on the spillover effect of component brand association [J]. Journal of Zhongnan University of Economics and Law, 2016. (in Chinese)
- [8] Lu Juan, Bian Yajing. Consumers' Evaluation of the Brand Alliance and its Influence Factors: A Case Study Based on a Two-dimensional Structure [J]. Management World, 2009. (in Chinese)
- [9] Washburn, J. H., Till, B. D., Priluck, R. "Co-Branding: Brand Equity and Trial Effects", Journal of ConsumerMarketing, 17(7), pp.591-604, 2000.
- [10] Simonin, B. L., Ruth, J. A. "Is a Company Known by the Company It Keeps? Assessing the Spillover Effects of Brand Alliances on Consumer Brand Attitudes", Journal of Marketing Research, 35(2), 1998, pp.30-41.
- [11] Voss, K., Gammoh, B. S. "Building Brands through Brand Alliances: Does a Second Ally Help?", Marketing Letters, 15(2-3), 2004, pp.147-159.