The Construction of Brand Personality Dimensions of Fresh E-commerce Platform from the Perspective of Consumption Perception

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Abstract: Driven by the competition in the fresh e-commerce market and the demand of consumers, China's fresh e-commerce platform is paying more and more attention to the construction and development of brand personality. Considering the particularity of the fresh e-commerce market, the existing brand personality dimension scale is difficult to accurately measure the brand of fresh e-commerce platform. In view of this, based on the existing brand personality scale, combined with consumer perception, design There are 5 dimensions of "Benevolence, Wisdom, Courage, Music, and elegance" and a brand personality scale of 21 characteristic words. Finally, from the theoretical and practical significance, it puts forward feasible suggestions for the brand personality of China's fresh e-commerce platform.

1. Introduction

In 2017, China's fresh e-commerce market transaction volume reached 139.13 billion yuan, and has maintained a growth rate of more than 50% for five consecutive years since 2013. On January 29, 2018, the State Council mentioned in the "Guiding Opinions on Promoting the Construction and Development of Agricultural High-tech Industry Demonstration Zones" that it supports the construction of agricultural products e-commerce platform, and provides strong policy support for the rapid development of China's fresh e-commerce platform. With the steady growth of active users in the fresh e-commerce field, the competition between the fresh e-commerce platforms is increasingly fierce. However, the personalization of the platform brand is of great significance to the market differentiation and positioning, which helps to stand out in the fierce competition.

Brand personality has always been a research hotspot in the field of marketing, specifically the personality characteristics that consumers can associate with when identifying a brand (Wang Jingqiang, Lin Jingyuan, Li dan, Xiao Qu (2018)).Enterprises often transmit specific brand images to consumers in the form of advertising information based on brand strategy to highlight brand personality. Consumers will make subjective evaluations of brands based on information clues, forming brand personality perceived by consumers (Nandan, Shiva (2015)). Based on the perspective of consumers, the existing scholars have carried out a lot of research on the personality dimension and related value of the brand. For example, Kang C, Bennett G and other sports(2016) brand based on the theme structure of the sports are collected and analyzed; Huang Shengbing, Lu Taihong(2003) built a Chinese localized brand personality dimension with consumer self-filled questionnaires; Su N and Reynolds D(2017) use self-consistency theory to reveal that brand personality has different roles in promoting brand selection; Wang Jingdong, Lin Jingyuan and others(2018) probe into the Cognitive Mechanism and Application of tourist destination Brand Personality for College students. But it is rare to discuss how to construct the brand personality dimension of fresh e-commerce platform from the perspective of consumer perception, however, exploring the brand personality dimension of fresh e-commerce platform is helpful for different positioning of fresh e-commerce platform to better carry out advertising appeal. The use of personalized marketing means can help consumers to enhance the brand recognition of fresh e-commerce platform, improve the brand value of fresh e-commerce platform, and form a differentiated brand positioning.

2. Literature research

Brand personality is the human personality trait of consumer cognition brand. Consumers usually use a descriptive vocabulary to describe a brand. For example, Sprite is "passionate and cool" and six walnuts are "healthy, brain-nourishing". Since the emergence of brand personality concept in the early 1960s, scholars have studied this field one after another. Keller (1993) believes that brand personality reflects consumers undefined perception of a certain brand and can satisfy the function of symbolism and self-expression of consumers. Fournier (1998) believes that "highlighting the brand's animation, humanization or some personalized method is a way to legalize the brand as a partner. Caprara (2001) defines brand personality as a person-based personality and uses brand as a human metaphor to understand brand perception. Aaker (1997) defines brand personality as a combination of personality traits, and based on the Western "Big Five" personality model, develops a "New Big Five" brand personality dimension scale that includes sincerity, excitement, ability, education, and rudeness. Geuens (2009) et al proposed five-dimensional personality dimensions of responsibility, activity, aggression, simplicity and emotion based on human personality attributes. Huang Shengbing, Lu Taihong and others (2003) took the Chinese local brand as the research object. From the perspective of Chinese traditional culture, they developed the "benevolence, wisdom, courage, music, elegance" five dimensions of the Chinese localization brand personality scale, and showed the benevolence, intelligence and elegant has strong cross-cultural consistency. He Jiaxun and Cong Junzi(2008) took the localized candy brand as the research object, and formed the five-dimensional brand personality scale of "Ren he, Shi Xin, elegance, honesty, wisdom".Hu Suihua and Wu Zhenxuan(2015) take welfare lottery as an example to develop the "authority, interest, welfare, snobbery, popular-simple, auspicious, traditional, mature" eight-dimensional brand personality.

As an important part of brand equity, brand personality plays an important role in the brand identity of related consumers (Jin Liyin (2006)). The closer the brand personality and the consumer personality, the easier it is for consumers to resonate, to form a brand identity, to close the distance between the brand and the consumer, and to enhance their desire to buy (Schouten J W (1991)). Through the brand personality positioning diagnosis method, it is found that for consumers, brand personality has a positive impact on brand attitude and purchase intention, but the intensity of consumers unwillingness to buy is different from that of their brand personality identity. For an enterprise, it is helpful for managers to make precise brand positioning and transform it into a unique competitive advantage by making clear the brand personality dimension of the industry in which the enterprise belongs (Zhao Hong, Zhang Xiaodan (2010)). Based on this, this study explores the brand personality dimension of fresh e-commerce platform from consumers' undefined perception of brand personality.

3. Research process

3.1 Brand personality

3.1.1 Research method

This study conducted a snowball questionnaire survey on consumers who used and familiarized with the fresh e-commerce shopping platform through QQ, WeChat and other media to study consumer brand personality perception. Drawing on the dimensional measurement methods of Aaker[9], Huang Shengbing et al[4], this study from "benevolence" (economy, original ecology, healthy, family, pragmatic), "wisdom" (innovative, reliable, professional, technical, teamwork, intelligent, responsible, safe), "brave" (novel, bold, authoritative), "fun" (modern, positive, young), "elegant" (tasteful, polite) five aspects of measuring fresh e-commerce Brand personality. The survey used a Level 5 Likert scale, with 1 representing very disagreed and 5 representing strongly agreed.

A total of 661 questionnaires were distributed in this study, and 458 questionnaires were collected. The effective rate of the questionnaire was 69.2%. The effective sample satisfies the requirement that the sample size is at least 5 times that of the measurement item. The demographic

analysis of the valid questionnaire is as follows: gender, the ratio of male to female is 36.46% and 63.54% respectively; in terms of age, about 46.07% under 20 years old, 31.22% from 21 years old to 30 years old, and 14.41% from 31-40 years old. %, 41 years old - 50 years old accounted for 7.64%, 51-60 years old accounted for 0.44%, 60 years old and above 0.22%; marital status, married about 32.97%, unmarried accounted for about 67.03%; in terms of education, high school and below consumption 16.81%, 16.59% of junior colleges and junior colleges, 64.19% with bachelor degree, 1.97% and 0.44% respectively for master's degree and doctoral degree; 54.15% for students and 7.86% for housewives. Professional staff accounted for 8.73%, service workers accounted for 7.86%, professionals accounted for 6.11%, company employees accounted for 6.11%, civil servants and institutions accounted for 2.62%, workers accounted for 4.59%, and other professionals accounted for 1.97%. In terms of income, the monthly income is about 63.76% below 2000 yuan, 16.59% in 2000-4000 yuan, 9.61% in 4000-6000 yuan, 5.68% in 6000-8000 yuan, 3.06% in 8000-10000, and consumers above 10,000 yuan accounted for only 1.31%.

According to the analysis report of China fresh e-commerce industry in the first quarter of 2018, there are five main categories: large-scale integrated platform, vertical e-commerce platform, O2O type, offline supermarket and farm direct marketing type, which are mainly composed of five main categories: large-scale integrated platform, vertical e-commerce platform, O2O type, offline supermarket and farm direct marketing type. The survey found that the higher consumption rate of the platform mainly concentrated in: large-scale comprehensive platform Jing Dong, Tian Mao, shop on, Amazon; vertical e-commerce platform; Hema fresh, fresh daily; O2O: Meituan, Eleme. Therefore, this study based on integrated e-commerce platform, vertical e-commerce platform and O2O fresh e-commerce platform to build brand personality dimension.

3.1.2 Brand personality dimension

In order to accurately measure the brand personality dimension of fresh e-commerce platform, this study used the brand personality dimension scale of Aaker (1997) and Huang Shengbing (2003) for reference, and using UCINET software to analyze the centrality of the 67 words (See Table 1). Degree indicates the centrality of each word in the 67 words, and the greater the centrality, the more important the word is in the system. At the same time, make the corresponding graph (See Fig.1), the denser the line, the larger the icon point is the most perceptive dimension.

Table 1 The degree of words

| word	degree	word	degree	word	degree
Innovative	920.00	Young	384.00	Leader	183.00
Reliable	833.00	Real	371.00	Male	182.00
Original Ecology	817.00	Southern	348.00	Attractive	178.00
Technical	784.00	Successful	345.00	Peaceful	155.00
Economy	778.00	Friendly	333.00	Confident	153.00
Healthy	773.00	Rigorous	327.00	Elegant	150.00
Professional	772.00	Polite	315.00	Upright	150.00
Modern	765.00	Positive	311.00	Independent	144.00
Intelligent	728.00	Harmonious	302.00	Optimistic	137.00
Environmentally Friendly	681.00	Mature	297.00	Steady	136.00
Family	672.00	Authoritative	279.00	Northern	133.00
Tasteful	627.00	Female	267.00	Happy	130.00
Teamwork	588.00	Cultural	265.00	Beautiful	112.00
Novel	584.00	Outdoor	264.00	Stilly	111.00
Responsible	566.00	Bold	257.00	Kind Hearted	105.00
Hardworking	540.00	Unique	225.00	Brave	100.00
Warm	536.00	Loyal	220.00	Lucky	96.00
Safe	459.00	Honest	218.00	Romantic	86.00
Stylish	432.00	Cool	200.00	Strong	82.00
Pragmatic	428.00	Traditional	192.00	August	80.00
Presentable	394.00	Aristocratic	187.00		
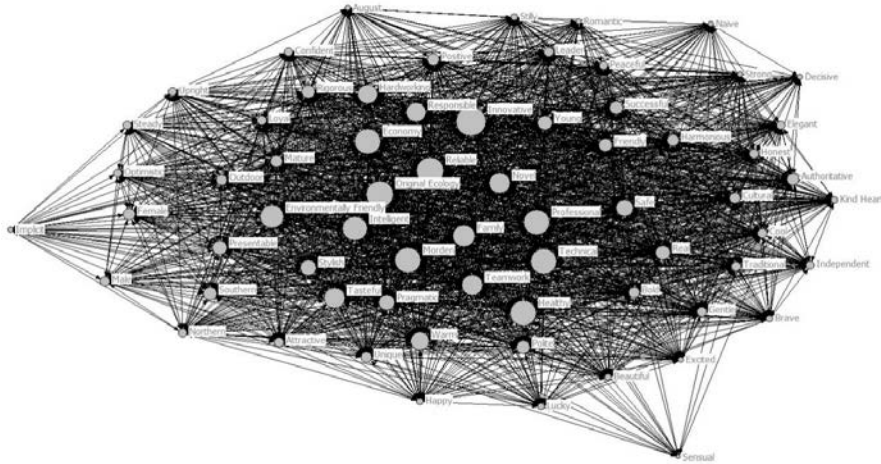
Fig.1. The social network diagram of the characteristic vocabular

As a result, this study identifies "benevolence" (economy, original ecology, healthy, family, pragmatic), "wisdom"(innovative, reliable, professional, technical, teamwork, intelligent, responsible, safe), "brave"(novel, bold, authoritative), "fun"(modern, positive, young),"elegant" (tasteful, polite)5 aspects to measure the brand personality of fresh e-commerce platform. At the same time, according to the above-mentioned survey items, the preliminary draft of the questionnaire, using the Likert five-level scale, 1 indicates a strong disagreement, 5 indicates a strong agreement. Moreover we invite five experts in the field of e-commerce were asked to review the draft questionnaire, which was revised according to their comments, and then passed the small-scale test of 42 questionnaires, resulting in 5 dimensions and 21 questions (See Table 2).

Table 2 Variable scale

Dimension	Feature	Measurement Item
Benevolence	Economy	You think the products offered by this brand are economical and affordable.
	Original Ecology	You think the brand's fresh produce is fresh.
	Healthy	You think that the brand's fresh products are clean and hygienic.
	Family	You think the brand's fresh produce is for the family.
	Pragmatic	You think the brand is committed to doing real or specific things.
Wisdom	Innovative	You think the brand is unique and innovative compared to other brands in the field.
	Reliable	You think the brand is reliable and reliable.
	Professional	You think that the brand's fresh e-commerce service is very professional.
	Technical	You think the brand is rich in technology in the process of selection, payment and distribution.
	Teamwork	You think the brand has established a stable and reliable team.
	Intelligent	You think the brand's operation process is convenient and user-friendly.
	Responsible	You believe that the brand is responsible to society, consumers and workers when it operates.
	Safe	You believe that the product, logistics and payment, after-sales service process provided by the brand is safe and reliable.
Brave	Novel	You think that the brand has brought you a new and unique feeling.
	Bold	You think the brand is rain or shine in the process of providing logistics services.
	Authoritative	You think the brand is prestigious and powerful in its field.
Fun	Modern	You think that the e-commerce brand is in line with the mainstream of the modern era.
	Positive	You think the brand advertising product updates are fast
	Young	You think that the brand will bring a young feeling when it is being promoted.
Elegant	Tasteful	You think that choosing this brand will show your taste and highlight your social status.
	Polite	You can feel the elegance and courtesy of the brand when it comes to providing services.

Examining the dimensions of brand personality through exploratory factor analysis (See Table 3 and 4), KMO is 0.981, and Bartlett's spherical test (Sig. = 0.000) is less than 0.001, indicating a high correlation between the variables, and the data has the conditions for factor analysis. Principal component factor analysis was performed using orthogonal rotation technique, which showed a cumulative interpretation of variance of 74.56%. On the basis of exploratory factor analysis, the reliability and validity of each dimension of brand personality are tested. The statistical results show that the Cronbach's α value of each dimension is higher than 0.8, and the reliability of the whole sample data reaches 0.981, indicating that each the measurement has a high consistency and can be used for dimension construction.

Table 3 KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.981
Bartlett's Test of Sphericity	Approx. Chi-Square	13629.867
	df	210
	Sig.	.000

Table 4 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.983	.983	21

4. Conclusion

This study takes the fresh e-commerce brand as an example, and analyzes the brand personality perception of the above 8 major fresh e-commerce platforms, and builds the brand personality dimension of the fresh e-commerce platform. Through our exploratory research, on the one hand, it proves the universal applicability of Aaker's "New Big Five" brand personality scale and Huang Shengbing's localized brand personality scale; on the other hand, it also shows that these fresh e-commerce brands are Its brand positioning has a high accuracy.

The research conclusion has very positive practical value and theoretical significance for the fresh e-commerce industry:

(1) Further expanding the research scope of fresh e-commerce, this study analyzes the consumer brand personality perception, and studies its brand personality characteristics with high perception, so as to build the brand personality dimension of the fresh e-commerce platform, breaking through the existing studies. The research on fresh e-commerce has created a brand personality dimension in the field of fresh e-commerce, enriching the research results of fresh e-commerce.

(2) The research conclusions also have positive practical value for the market positioning, strategy formulation and implementation of fresh E-commerce related enterprises. The research conclusions show that brand personality is the consumer's perception of the brand. According to the survey, this cognition is often related to the enterprise. The brand's design and implementation of marketing strategies, such as advertising, directly related, and even the direct result of the company's implementation of its marketing strategy, in this era of intense Internet competition, this study makes the correct brand positioning for fresh e-commerce related companies and the marketing method has a strong guiding role.

The limitations of this paper are mainly reflected in: 1 In the choice of respondents, the sample selection mainly consists of college students and some teachers, QQ friends, friends of friends and members of some research companies online, without cross-class investigation. It is still unclear about the personality perception of the high-income people and the upper class on the fresh e-commerce brand, so that the conclusion of the study will be interfered by the sample occupation and local characteristics. 2 In the choice of fresh e-commerce brand, there is no full coverage, such as offline supermarkets, farm direct-type fresh e-commerce types are not involved, brand personality vocabulary is missing. This is also a place for further improvement in future research.

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