

Research on Connotation Mining and System Construction of Jewelry Brand Cultural Marketing

Guo Ning, Chenggang Li*

School of Business, Beijing Institute of Fashion Technology, Beijing, China
Email: *ccid205@126.com

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Abstract

As a luxury item, the symbolic significance of consuming its products outweighs its physical value. In the actual application process of jewelry cultural marketing, the lack of comprehensive knowledge and deep understanding of jewelry brand cultural marketing, the lack of in-depth exploration of the connotation of jewelry brand cultural marketing, and the lack of effective implementation path of jewelry brand cultural marketing are not conducive to enterprises to accurately grasp consumer needs and formulate corresponding marketing strategies. Starting from the analysis of the essential characteristics of jewelry brand marketing, this paper systematically combs the integration process, theoretical basis and best practice of jewelry brand and culture through literature research. At the same time, using the case analysis method, it concretely analyzes how many jewelry brands use mainstream cultural elements to integrate brand positioning and then adopts the inductive deduction method. General rules and strategies are extracted from specific cases to provide an operable guiding framework for jewelry brand cultural marketing, shape the image of jewelry brands, and enhance the value of brands.

Keywords

Jewelry Brands, Cultural Marketing, System Construction

1. Introduction

Jewelry is an important carrier of human history, culture and personality expression as an object to meet human decorative needs. On the one hand, with the process of globalization, the competition in the jewelry market is becoming increasingly fierce. Jewelry brands need to find new differentiation strategies to

stand out. On the other hand, with the development of social economy and the upgrading of people's consumption demand level, people pay more and more attention to the cultural connotation and emotional value of products. Nowadays, the jewelry industry faces challenges such as serious brand homogeneity and diversified consumer demand. Brand culture marketing, as a means of enterprise model innovation and change, has become a new highland of enterprise market competition.

Although the application of brand culture marketing in the jewelry industry has been widely recognized in concept, there are still some problems and deficiencies in practice. It is reflected in the following aspects: the theoretical research on jewelry cultural marketing is relatively scattered and lacks a systematic theoretical system, which leads to the lack of comprehensive understanding and deep understanding of jewelry brand cultural marketing in the practical application process. The connotation of jewelry brand cultural marketing is not deep enough, which is not conducive to enterprises accurately grasping consumer needs and formulating corresponding marketing strategies. Due to the lack of an effective implementation path for jewelry brand cultural marketing, the final cultural marketing effect is not satisfactory.

Based on the above problems, this paper starts with an in-depth exploration of the connotation of jewelry brand cultural marketing, and puts forward suggestions on building a scientific and effective theoretical system and implementation path of jewelry brand cultural marketing according to the current status and problems of jewelry brand cultural marketing.

2. Literature Review

Brand culture marketing is an important marketing strategy in the field of marketing, which has been concerned by academia and industry. Combing through the existing literature, the research on jewelry brand cultural marketing mainly focuses on the following aspects.

First of all, research on the connotation of jewelry brand cultural marketing. The academic circles mainly focus on the research of the connotation of cultural marketing, and there is no clear definition of the connotation of jewelry brand cultural marketing. According to Mao (Mao, 2003), Cultural marketing refers to a marketing method in which enterprise operators use cultural resources to enhance the added value of products and services through the design and creation of cultural concepts, and realize market exchange in meeting and creating consumers' cultural needs for truth, goodness and beauty. Zhu (Zhu, 2009) believes that cultural marketing is a marketing method in which marketers consciously discover, identify and cultivate the spiritual and cultural needs of consumers by penetrating corresponding cultural factors into the marketing process to enhance the added value of products and services to better achieve market exchange. Ba (Ba, 2017) believes that cultural marketing is to run cultural concepts through all aspects of marketing in order to realize the value of products and

meet the cultural needs of consumers. Zhou and Yang (Zhou & Yang, 2010) put forward that cultural marketing is the marketing concept and marketing image formed by enterprise marketing personnel and related personnel under the influence of enterprise core values.

Secondly, about the jewelry brand cultural marketing model research. Jiang (Jiang, 2010) proposed that the implementation of cultural marketing should introduce cultural factors into the brand, adopt new and diversified cultural marketing strategies and forms, use brand strategy to “control” marketing activities, grasp the dynamics of the whole cycle of product production and sales, and pay attention to innovation and key technologies. Jiang (Jiang, 2015) believes that the specific strategy for enterprises to implement cultural marketing is to first grasp the cultural needs of consumers, then scientifically design product packaging and advertising slogans, innovate marketing methods, and finally pay attention to constantly improving product quality. Lian and Zhou (Lian & Zhou, 2017) also put forward corresponding cultural marketing strategies after analyzing the concept and value of product cultural marketing. Li (Li, 2021) mainly studied the realization of Zhuji pearl industry brand construction through cultural marketing and proposed that we should first speed up the creation of brands with cultural connotations, then improve the cultural innovation of products, and at the same time create the enterprise ingenuity culture. In addition, we should pay attention to the promotion of jewelry culture through multiple channels.

In addition, about the jewelry brand cultural marketing system construction research. The implementation steps of cultural marketing proposed by Sun (Sun, 2008) are as follows: first establish the concept of cultural marketing, then implement the concept of cultural marketing, and finally spread cultural marketing. Lu (Lu, 2010) believes that the construction of a cultural marketing strategy system should be carried out from four levels: product culture, brand culture, enterprise culture and industrial culture. Qiao (Qiao, 2015) built brand culture marketing from the understanding level and proposed five dimensions of analysis: brand cultural value, brand cultural attributes, brand cultural personality, brand cultural interests and brand cultural users.

In summary, the current research results on jewelry brand cultural marketing have laid the foundation for this study. In view of this, this study will start from the connotation mining and system construction of jewelry brand cultural marketing, in order to provide more targeted guidance for jewelry industry enterprises to develop cultural marketing strategies.

3. Development Status of Chinese Jewelry Brand Cultural Marketing

3.1. The Basic Situation of China's Jewelry Market

According to the data of China Treasure Association, the scale of China's jewelry market continues to expand, from 550 billion yuan in 2017 to 720 billion yuan in

2021, and the scale of China's jewelry market in 2021 increased by 18% year-on-year (China Jewelry Industry Development Report, 2021). The market size in 2022 is 719 billion yuan, which is basically the same as that in 2021 (The Chinese Jewelry Industry Development Report, 2022) as shown below (Figure 1). This growth trend reflects the huge potential and broad prospects of China's jewelry market, which provides a broad space for brand cultural marketing.

By analyzing the "Jingdong 11.11 Jewelry Consumption Observation" released by Jingdong Consumption and Industry Research Institute on November 6, 2023, Zhongbao Association found that according to Jingdong data, among the jewelry consumers, people under 35 years old are as high as 67%, of which people under 25 years old account for 11%, and people between 26 and 35 years old account for 56%. This data reflects the current trend of younger jewelry consumption (Figure 2 below). This change not only reflects the increasing demand for jewelry among young consumer groups but also reflects the unique cognition and attitude of contemporary young consumers toward jewelry. For jewelry brands, cultural marketing is the key to connecting with young consumers. Domestic well-known jewelry brands such as Chow Tai Fook, Dream Gold Garden, Old Temple and so on in the field of brand culture marketing have been actively explored. For example, Chow Tai Fook grasped the psychology of contemporary young consumers advocating "happiness", "wealth" and "happiness", and jointly signed with tea, combining the output of brand culture with the hot

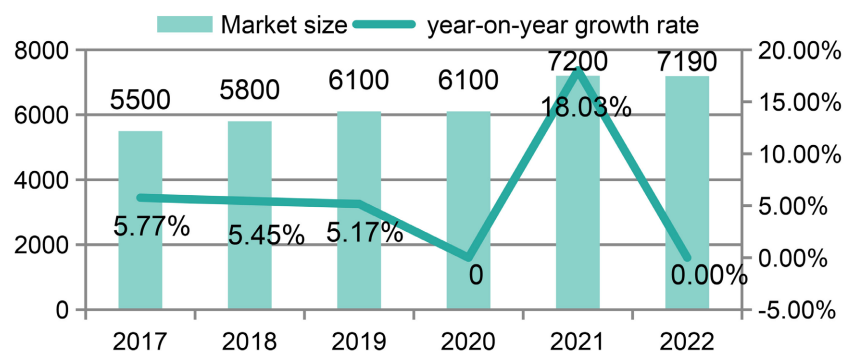


Figure 1. Market size of China's jewelry industry 2017-2022. Data source: "China Jewelry and Jade Jewelry Industry Association".

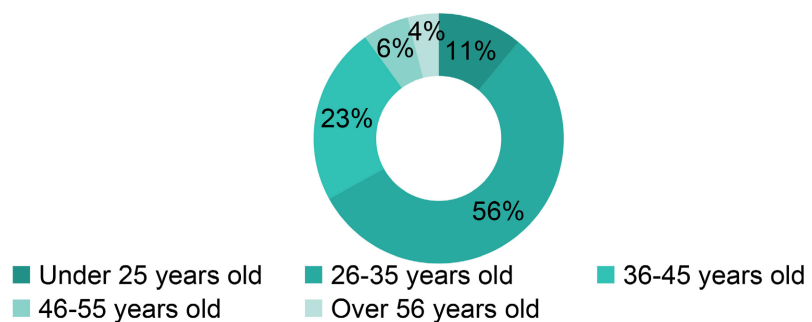


Figure 2. Proportion of jewelry turnover of different age groups in the first week of Jingdong 11.11. Data source: "China Jewelry and Jade Jewelry Industry Association".

spots of young consumers' attention. Dream Gold Garden United Nations' intangible cultural heritage "Yanjing eight wonders" and cultural treasure "three holes culture" launched the "master crafter biography" series, while working together with virtual digital people Xiao Zhu, through digital technology to make traditional culture and intangible cultural heritage technology become fresh and new. The old temple revolves around the "good luck culture", integrates Chinese and Western elements, depicts "peace" in a fashionable way, and launches the "Old Temple Ancient rhyme Everything Jin 'an'" series to meet people's eager desire for peace.

3.2. Analysis on the Characteristics of Integrating Traditional Culture into Jewelry Brand

With the increasing competition in the domestic jewelry industry, in order to cater to the changes in the current market environment, the promotion of brand core value has become inevitable, and the shift from simple product marketing to cultural marketing has become a trend, so brand cultural marketing has increasingly attracted more attention. At present, the integration of traditional culture into jewelry brand marketing is mainly reflected in the following four aspects.

1) Deeply explore the connotation of traditional culture in jewelry design

Many jewelry brands will explore the historical background, dig out unique cultural stories and value concepts, refine traditional design elements, inherit excellent traditional crafts, and integrate them into the brand image or product design. For example, YIN Yin, an upstart Chinese designer brand, has launched a tai Chi collection that incorporates the ancient philosophical concept of the harmony between Yin and Yang into its product design and promotion. The "flower silk candy" series of jewelry launched by Chao Hongji combined with intangible cultural heritage technology makes the intangible cultural heritage of flower silk enter people's vision with a young, fashionable and sweet image.

2) Promote the integration of traditional culture and jewelry in multiple levels and dimensions

The integration of traditional culture and jewelry is reflected in many aspects such as design concept, process technology and product presentation. It includes the integration of aesthetic concepts in traditional culture, the inheritance and innovation of traditional craft, and the integration of materials and regional culture. For example: the symbol of wealth and auspiciousness of jade, many jewelry brands will use this cultural image as the marketing direction of jade products; The "Yusee Dunhuang" series of jewelry produced by Dunhuang Academy and Yu Shunxing is the integration of jewelry and Dunhuang regional culture.

3) In brand communication, strengthen the cross-border integration of jewelry brands and culture

At present, jewelry brands will adopt different communication methods to achieve cultural marketing of jewelry brands, including launching corresponding

product designs on traditional festivals to achieve marketing, through cross-border cooperation in other cultural fields or well-known IP, and through traditional channels + digital channels to spread cultural marketing. For example, during the Spring Festival, Zhou Dasheng launched a jewelry design with the theme of transport, marriage, gift, etc.; Chow Tai Seng has cross-border cooperation with the well-known cocktail brand RIO, the well-known game “Peace Elite”, and the well-known snack brand Weilong.

4) Actively carry out experiential marketing of jewelry brand and culture integration

Cultural marketing is achieved through different promotion methods, including providing consumers with rich cultural experience activities, and launching culturally themed gifts and member rights, such as limited edition souvenirs and exclusive cultural experience activities for members. For example, the Caibai Museum established by Caibai Shares combines the museum without shopping scenes, so that consumers can get cultural and artistic experiences while shopping.

To sum up, China’s jewelry industry shows the characteristics of continuous expansion of market scale, the obvious trend of youth and integration of traditional culture into jewelry brand marketing. The expansion of the market size provides impetus for brand innovation, while young consumers are more focused on personalization and fashion, prompting brands to strengthen cultural marketing. At present, jewelry brands have made certain achievements in the field of cultural marketing, but how to better combine traditional culture and jewelry to create jewelry products and brands with unique charm still needs to be considered.

4. The Problem of Cultural Marketing of Chinese Jewelry Brands

Although many jewelry brands have achieved certain results in the field of cultural marketing, there are still several problems in practice.

1) Insufficient in-depth exploration of cultural connotation

In jewelry cultural marketing, the superficial mining of traditional cultural connotations often only stays in the simple application of cultural elements, and the understanding and mining of cultural depth are insufficient. As a result, the cultural marketing of brands lacks depth and uniqueness, and it is difficult to establish a deep emotional connection with consumers.

At the same time, it also has the phenomenon of “trivialization” that blindly caters to the public psychology. Although some well-known domestic jewelry brands emphasize cultural marketing, they pay too much attention to the cultural connotation of the product itself in the process of implementing cultural marketing. The lack of a clear positioning of their own brand culture, failure to deeply explore and display the history, tradition and values carried by the brand, and only stay in the product lead to consumers not forming unique cognition and memory of the brand.

2) The combination of culture and jewelry is not close enough

When jewelry brands try to combine jewelry with culture, they often only ap-

ply certain cultural elements into product design, lacking in-depth understanding and proper use of culture. For example, some jewelry brands simply use traditional Chinese elements or symbols in product design, without a deep understanding of the history, philosophy and aesthetic thoughts contained in the elements and symbols. Such a simple combination is blunt and superficial and does not really reflect the charm of culture and the uniqueness of jewelry.

3) Limitations of communication channels

Due to the characteristics of the industry, in terms of communication channels, the jewelry industry is slightly traditional. In the implementation of cultural marketing, many jewelry brands in China are still in the initial stage of using emerging channels (Facebook, Instagram, Twitter, Weibo, WeChat and other social media platforms) and digital marketing means (Metacom, live broadcast, social media advertising, user-generated content, community building, etc.). They have a strong dependence on traditional communication channels (advertising, print media). However, with the development of digitalization and social media, young consumer groups are more inclined to obtain information and purchase goods through the Internet and social media. Therefore, jewelry brands need to pay more attention to the communication of emerging channels.

4) Homogenization of promotional means

In the context of increasingly fierce market competition, innovation and differentiation of promotion are particularly important to attract consumers. At present, the promotion methods of Chinese jewelry brand cultural marketing mainly focus on festival promotion, star endorsement, cultural exhibitions and experience activities. Although certain results have been achieved, at present, with the continuous development of digitalization and new media, the promotion methods of Chinese jewelry brands are relatively traditional and homogenized, and they fail to make full use of new digital technologies to improve consumer experience and interaction. New technologies such as artificial intelligence, virtual reality and augmented reality will provide more possibilities for jewelry brand cultural marketing.

To sum up, there are still some problems in the cultural marketing of Chinese jewelry brands. In order to gain advantages in the fierce market competition, jewelry brands engaged in cultural marketing need to pay more attention to the mining of traditional culture and the connotation of brand culture, deeply understand the combination of jewelry and culture, actively explore new communication channels and innovate promotion methods.

5. Suggestions and System Construction of Chinese Jewelry Brand Cultural Marketing

5.1. Suggestions for Chinese Jewelry Brands Engaged in Cultural Marketing

In view of the above-mentioned problems in the cultural marketing of Chinese jewelry brands, this paper gives some suggestions.

1) Deeply explore the connotation of traditional culture and brand culture

Chinese jewelry brands can cooperate with cultural experts and historians to understand the history, philosophy and aesthetic thoughts of traditional culture; At the same time, jewelry brands should have a clear positioning of their own brand culture, dig deeply into the history, tradition and values carried by their own brands, and integrate the two into the brand product design and brand communication to form a unique brand cognition and brand memory.

2) Strengthen the understanding and proper use of culture

On the basis of in-depth exploration of the connotation of traditional culture and brand culture, on the one hand, jewelry brands can integrate traditional culture with modern design concepts, and encourage designers to explore more creative possibilities on the basis of respecting and inheriting traditional culture. On the other hand, jewelry brands can learn from interdisciplinary research methods, through cooperation with historians, philosophers, artists, etc., through interdisciplinary research to explore new creative and design ideas.

3) Actively introduce new communication channels

Jewelry brands should strengthen the use of digital communication channels, through the use of social media platforms, meta-universe technology, live streaming and other emerging communication channels, to establish a closer connection with consumers. At the same time, attention should also be paid to traditional communication channels to form a diversified communication network of traditional + emerging.

4) Actively explore innovative means of promotion

Jewelry brands can provide consumers with personalized shopping experience and interaction through the use of new digital technologies: artificial intelligence, virtual reality, augmented reality, etc. For example, through AR technology, customers can “try on” jewelry on their mobile phones, or through VR technology, consumers can browse and choose their favorite jewelry styles and sizes in the virtual scene, and try to match different clothes and occasions. Combined with social media sharing features, consumers can share photos or videos of virtual tries with friends, increasing social interaction and brand exposure.

5) Strengthen the analysis and positioning of target market

Different consumers have different understanding and needs for culture. When implementing cultural marketing, jewelry brands can, on the one hand, understand the target market through questionnaires, in-depth interviews, surveys by professional organizations, etc. On the other hand, establish consumer databases, collect and sort out consumers’ basic information, purchase records and preferences for data analysis, and determine target consumer groups. So as to formulate targeted marketing strategies to enhance marketing effect. sure opportunities. To sum up, the larger the number of fans, the lower the Instagram participation rate will generally be.

5.2. Construction of Chinese Jewelry Brand Culture Marketing System

In terms of the system construction of Chinese jewelry brand cultural marketing,

it mainly includes five parts (see **Figure 3**), which are: establishing cultural marketing awareness, mining brand connotation and cultural connotation, dimension and mode of integration of culture and jewelry, formulation, implementation and evaluation of cultural marketing strategies.

1) Establish cultural marketing awareness

Based on the particularity of jewelry products, cultural marketing is an important part of the innovation and change of jewelry brands in the face of fierce market competition. In the establishment of cultural marketing awareness, enterprise executives and internal employees should recognize the necessity of cultural marketing. The support and participation of the top management of the enterprise can ensure that the implementation of cultural marketing can obtain sufficient resources; Enterprises can organize training and publicity activities to let employees understand the core concept, function and practice of cultural marketing; In addition, enterprises should strengthen cross-departmental communication to ensure that cultural marketing is effectively implemented in all departments.

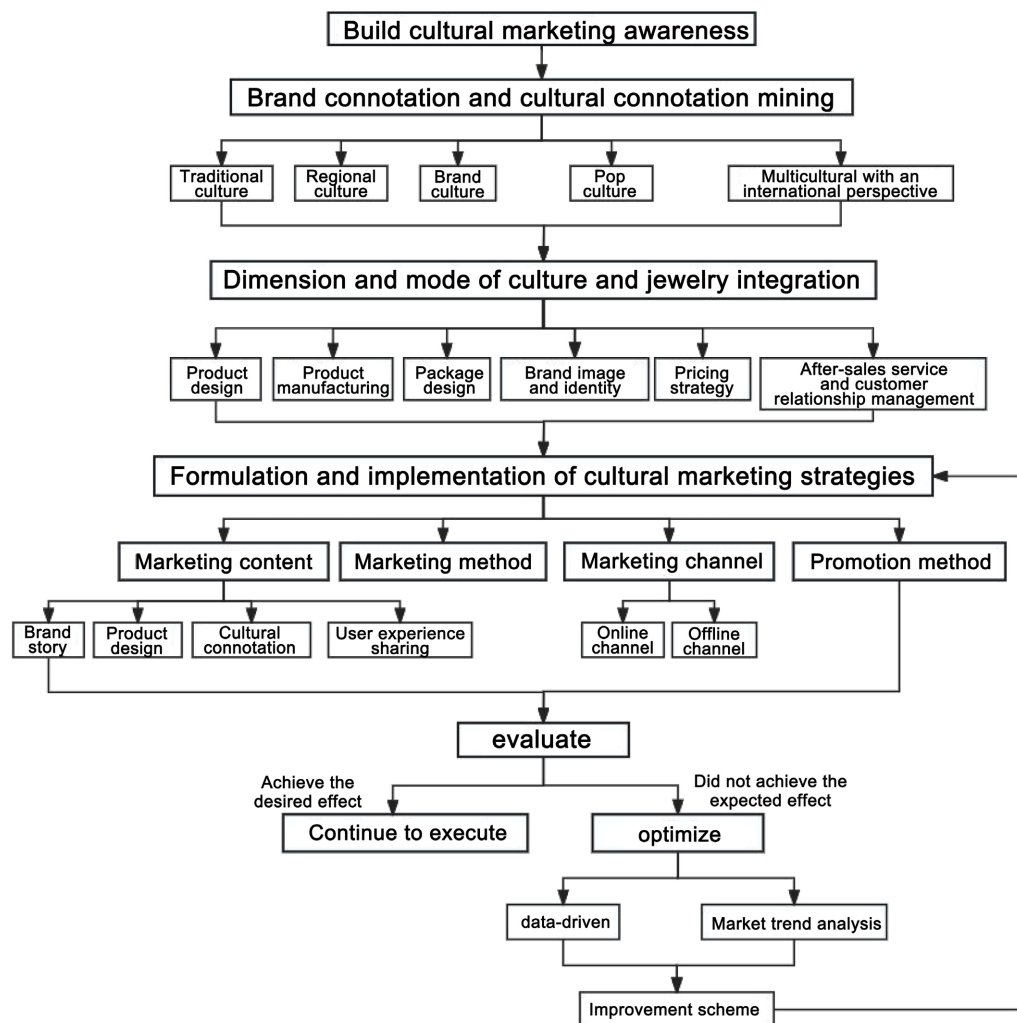


Figure 3. Chinese jewelry brand culture marketing system construction flow chart.

2) Excavating brand connotation and cultural connotation

The mining of brand connotation and cultural connotation mainly includes five parts: brand culture, Chinese traditional culture, regional culture, popular culture, international perspective and other multi-culture. In this part, the most important thing is that enterprises should have a clear positioning of their own brand culture, choose a culture consistent with their own brand values, and deeply explore the cultural demands of target customer groups.

3) Dimensions and modes of integration of culture and jewelry

It is a general trend to integrate culture into the whole life cycle of jewelry production and sales, which mainly includes: product design, product production, packaging design, pricing strategy, brand image and logo, after-sales service and customer relationship management. Integrate cultural connotations into product and packaging design, pay attention to the inheritance and innovation of traditional processes in product manufacturing, consider the impact of cultural factors on consumer psychology in pricing, design brand images and logos with cultural characteristics, and convey the core values of the brand. Provide cultural characteristics of after-sales service and establish a cultural exchange and interaction mechanism with customers to provide personalized service and experience.

4) Formulation and implementation of cultural marketing strategies

The formulation of cultural marketing strategy needs to consider marketing content, marketing methods, marketing channels, promotion methods and so on.

Marketing content mainly includes brand story, product design, cultural connotation, user experience sharing and so on. Brand story mainly conveys brand value and concept, product design marketing mainly includes product design, material and process, cultural connotation mainly spreads the cultural added value of products, user experience sharing includes inviting real users or stars, big V to share the experience and feelings of wearing jewelry, and increase brand reputation and trust.

The marketing method mainly combines the core values of the enterprise to choose the appropriate way. For example content marketing, event marketing, cooperative marketing, social media marketing, KOL cooperation, member marketing, cross-border cooperation, experiential marketing, digital marketing, event marketing, word-of-mouth marketing, community building, data-driven marketing, event sponsorship and event planning, international marketing, multimedia integrated marketing, personalized customized services, customer care and service optimization, etc.

Marketing channels mainly include online channels and offline channels. Online channels include: official website, social media, e-commerce platform, live broadcast platform, email marketing, etc. Offline channels include: physical stores, exhibition activities, sponsorship activities, experiential marketing, etc. Enterprises choose appropriate marketing channels according to the core values

they need to convey.

In terms of promotion methods, in addition to time-limited discounts, gift activities, member offers, combined package sales, recommended prizes, time-limited instant kill activities, cross-border cooperation offers, customized gift services, VP exclusive services, holiday promotions, points redemption activities, etc., we can also combine artificial intelligence, AR, VR and other technologies to provide customers with more novel and pleasant shopping experience, such as: AR interactive advertising, AR try-on, VR experience hall, use intelligent recommendation system to recommend suitable products for customers, and hold virtual cultural exhibitions, art performances or fashion shows and other activities on the meta-universe platform.

5) Evaluate

In the evaluation, some enterprises can evaluate the effect of cultural marketing activities, such as participation in marketing activities, sales performance, brand awareness and reputation, and consumer satisfaction through data statistical analysis, market research, competitive product analysis and other methods to find out the existing problems and shortcomings, so as to provide data support and basis for optimization.

When the marketing effect is found to be out of the expectation, the cultural marketing strategy and activity plan should be improved through data-driven decision-making, market trend analysis, internal discussion and feedback, etc., so as to improve the marketing effect and brand competitiveness, meet consumer demand and improve satisfaction.

6. Conclusion

This paper comprehensively discusses the status quo, problems, suggestions and system construction of Chinese jewelry brand cultural marketing. The research finds that although the current Chinese jewelry brand cultural marketing has developed to a certain extent, there are still some problems such as superficial and shallow connotation mining, the combination of culture and jewelry is not close, the limitation of communication channels, and the homogenization of promotion means. In response to these problems, this paper puts forward suggestions such as digging deep into the connotation of traditional culture and brand culture, strengthening the understanding and proper use of culture, actively introducing new communication channels, actively exploring innovative promotional means, and strengthening the analysis and positioning of target markets. It also constructs a jewelry brand cultural marketing system, which includes six dimensions, including the establishment of cultural marketing consciousness, market environment analysis and target market positioning, the mining of brand connotation and cultural connotation, the combination of culture and jewelry, the formulation and implementation of cultural marketing strategies, and evaluation. This study not only helps to enhance the cultural value and market competitiveness of Chinese jewelry brands, but also provides new

ideas and directions for the sustainable development of the jewelry industry.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Ba, C. (2017). Discussion on the Connotation and Marketing Strategy of Cultural Marketing. *Modern Marketing (Next Ten-Day Issue)*, 12, 75.
- China Jewelry Industry Development Report. (2021). *China Jewelry and Jade Jewelry Industry Association*.
https://www.jewellery.org.cn/jewelleryorgwebsite/sub/element_detail_index_new?label_id=52&element_type=0&element_id=27540
- Jiang, B. Q. (2015). Some Thoughts on the Development of Corporate Culture Marketing. *Modern Economic Information*, 11, 67.
- Jiang, C. L. (2010). Brand Strategy and Cultural Marketing. *Enterprise Research*, 10, 76-77.
- Li, H. (2021). Zhuji Pearl Industry Based on Cultural Marketing Brand Construction Research. *Journal of Modern Business*, 21, 49-52.
<https://doi.org/10.14097/j.cnki.5392/2021.32.016>
- Lian, L., & Zhou, W. (2017). Cultural Marketing Strategies of Creative Products. *Journal of Suzhou University*, 32, 33-35. (in Chinese)
- Lu, Z. (2010). Research and Practice of Cultural Marketing Strategy System. *Economic Development and Management Innovation—Proceedings of the 10th Annual Conference of the National Association of Industrial Technology of Economic Management Colleges* (pp.328-332). Department of Economics and Management, Zhongshan Vocational and Technical College
- Mao, Q. Y. (2003). On the Connotation and Characteristics of Cultural Marketing. *Jiangsu Business Theory*, 20, 72-73.
- Qiao, Y. (2015). Multi-Dimensional Construction and Practice Exploration of Brand Culture Marketing. *Business Economics Research*, 34, 66-67.
- Sun, J. L. (2008). On Cultural Marketing Based on Building Cultural Soft Power. Ph.D. Thesis, Shandong Normal University.
- The Chinese Jewelry Industry Development Report 2022. (2022). Chinese Jewelry Jade Jewelry Industry Association.
https://jewelleryupload.oss-cn-beijing.aliyuncs.com/temp/202370069313_6093.pdf
- Zhou, H., & Yang, D. Y. (2010). Corporate Culture Marketing—The Marketing Model of the 21st Century. *Liaoning Economy*, 17, 68-69.
- Zhu, T. (2009). Review on the Definition of “Cultural Marketing” Construct. *Journal of Sichuan University of Arts and Sciences*, 19, 121-124.