



Optimization of Brand Packaging Design of Agricultural Products Under the Perspective of Regional Culture

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Abstract. In order to enhance the packaging design and brand recognition of Qixia apple agricultural products, this study constructs a set of strategic framework aimed at optimizing and enhancing the brand of regional agricultural products. Taking the ecologically advantageous agricultural products in Qixia as the entry point, this framework seeks to explore a new path of packaging design for regional agricultural products that can both highlight the product advantages and contain cultural connotations based on the in-depth analysis of the current situation of Qixia's agricultural products and the elements of the regional culture, and on the basis of the in-depth analysis of the outstanding domestic and international design cases. It is expected that the implementation of this path will further accelerate the implementation process of the rural revitalization strategy of Qixia, and significantly enhance the market share and brand awareness of ecological agricultural products in Qixia.

Keywords: rural revitalization; characteristic agricultural products; brand packaging design; regional culture.

1 Introduction

In the context of increasingly fierce competition in the global agricultural market, regional culture, as a key resource for brand differentiation, plays a crucial role in enhancing the brand value and market competitiveness of agricultural products [1]. Qixia apple, originated from Qixia City, Shandong Province, China, is well known in the market for its excellent quality and unique taste. However, under the current market environment, how to further optimize the brand packaging of Qixia apples, especially with regional culture as the entry point, to enhance its brand recognition and consumer attractiveness, has become a core problem to be solved.

In the context of increasingly fierce competition in the global agricultural market, regional culture, as a key resource for brand differentiation, plays a crucial role in enhancing the brand value and market competitiveness of agricultural products. This study aims to explore the influence mechanism of regional culture on the optimization of brand packaging of Qixia apples, with a view to enriching its cultural connotation

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and enhancing its international competitiveness by exploring and integrating regional cultural elements. In order to achieve this goal, this study will adopt the methods of literature review and case study analysis to systematically sort out the relevant theoretical and practical achievements of regional culture and brand packaging of agricultural products, examine the current situation of Qixia apple industry and brand packaging in depth, identify the existing problems and challenges, and put forward the specific paths and strategic suggestions of integrating regional culture into the brand packaging in an exploratory manner. This study is expected to provide theoretical basis and practical guidance for the construction and upgrading of agricultural brands in Qixia apple and even in a wider region, and then open up new ideas and paths for the sustainable development of regional characteristic agricultural brands.

2 The Current Situation of Traditional Ecological Advantageous Agricultural Products Brand Packaging Design

2.1 Weak Design Consciousness

At present, the packaging design of many traditional ecologically advantageous agricultural products is still limited to the basic protection function, lacking in-depth brand awareness and aesthetic design considerations [2]. This directly leads to the rudimentary appearance of the packaging, the incongruity of the color scheme, and the lack of attractiveness of the pattern and text design, which can't effectively attract the attention of consumers, which in turn seriously limits the enhancement of the value of the brand and the potential for market expansion. Some agricultural producers overemphasize the intrinsic quality of the product, but neglect the key role of packaging as the "first impression" of the product [3]. They may hold an outdated concept that as long as the product is of high quality, packaging is irrelevant. However, in the context of modern market competition, this concept is obviously out of date. Because consumers in the purchase process, often the first through the packaging to judge the quality and value of the product.

2.2 Lack of Cultural Elements

Regional culture and agricultural product characteristics are highly valuable resources in brand packaging design, which can inject uniqueness and deep cultural connotation into the brand [4]. However, in reality, these valuable elements are often neglected or not fully explored and utilized. The packaging design of many agricultural products does not effectively convey the uniqueness and regional cultural background of the products, resulting in consumers not being able to deeply feel the cultural connotation of the products and their added value. For example, some agricultural products with a long history and unique production technology lack detailed introduction and display of these features on their packaging, which makes consumers unable to fully understand

and appreciate the unique charm of these products, thus affecting the market competitiveness of the product and the enhancement of brand value.

2.3 Insufficient Application of Environmentally Friendly Materials

With the enhancement of environmental awareness and the concept of sustainable development in-depth, consumer demand for green packaging shows a growing trend. More and more inclined to choose those who use environmentally friendly materials, with recyclability or easy degradation characteristics of packaging products. However, in the field of traditional packaging of agricultural products, non-environmentally friendly materials such as plastics still occupy a dominant position [5]. This phenomenon is not only contrary to the principles of environmental protection and sustainable development, but also may weaken consumers' trust and willingness to purchase products. Specifically, some consumers may avoid purchasing certain agricultural products out of concern for the environmental pollution that may be caused by plastic packaging, which constitutes a negative impact on the market competitiveness of agricultural products.

2.4 Inefficient information transfer

Packaging as a key carrier of product information, its information transfer efficiency has a direct impact on consumer purchasing decisions. A clear design, accurate information, easy to recognize the packaging, can effectively convey to consumers the product features, advantages and methods of use and other core information. However, the current packaging of many agricultural products has obvious deficiencies in information transfer. For example, some of the product information on the packaging is vague and unclear, the layout is chaotic and disorderly, the font is too small or the color contrast is insufficient, all these problems make it difficult for consumers to quickly and accurately obtain the required information. This not only seriously affects the consumer's buying experience, but also may lead to the abandonment of the purchase decision because they cannot fully understand the product, thus adversely affecting the sales and market competitiveness of the product.

3 Innovative Qixia Apple Agricultural Brand Packaging Design and Enhancement of Ideas

In view of the differences in the ecological resources of agricultural products, its packaging design, compared with other products, needs to emphasize the standardization, generalization and serialization requirements. From the perspective of packaging design of agricultural products, the integration of advantageous agricultural resources can not only effectively avoid the reuse of the same design elements by local small and medium-sized workshops, but also significantly reduce the phenomenon of uneven levels of packaging design of agricultural products on the market. While integrating industrial resources, it should be committed to upgrading the design mode in order to

enhance the level of overall regional packaging design. In the strategic context of rural revitalization, in order to improve the problems of rough packaging design of traditional agricultural products and insufficient brand influence, the packaging optimization design and enhancement of ecologically advantageous agricultural product brands has become an effective path. In this paper, this process needs to follow the following basic principles.

3.1 Strengthen Brand Design Awareness

Agricultural enterprises in the face of increasingly fierce market competition, should attach great importance to the importance of brand packaging design. Brand packaging design is not only the embodiment of the external image of the product, but also a key means to enhance brand value and market competitiveness [6]. To achieve this goal, enterprises should actively introduce professional design teams or strengthen the training and development of internal designers to enhance the overall level and aesthetic value of packaging design. At the same time, it is important to ensure a high degree of coordination and unity between the packaging design and the inner quality of the product, and accurately and vividly convey the quality and characteristics of the product, so as to establish a unique brand image in the minds of consumers. This requires enterprises to deeply understand the needs and preferences of target consumer groups, and use market research and consumer behavior analysis to obtain accurate market information. At the same time, pay attention to cultivate designers' innovation ability and understanding of the brand concept, to ensure that the packaging design is consistent with the brand image and market attractiveness. In addition, enterprises also need to establish a strict quality control system, strict audit and testing of packaging design, in order to maintain consumer trust and brand reputation. In summary, agricultural enterprises should optimize brand packaging design to establish a unique brand image in consumers' mind, so as to enhance brand value and market competitiveness. As shown in Figure 1, Bristol City Football Club's logo has been upgraded as shown in Figure 1. The new logo has been streamlined from the original version by simplifying the overly complex logo shapes and colours in the graphic. The original logo featured a very realistic image of the animal, with great detail in the eyes and mouth, making it look more like a sophisticated drawing. The redesigned bird shape is more symbolic and unnecessary colours and lines have been removed, leaving only the colours red, white and black. The new logo is easier to recognise and remember than the previous version.



Fig. 1. Onfido brand upgrade for UK AI provider

3.2 Digging Deep into Regional Cultural Elements

Regional culture and agricultural characteristics are valuable resources in brand packaging design, which can inject uniqueness and deep cultural connotation into the brand [7]. Therefore, agricultural enterprises should deeply integrate regional culture and agricultural characteristics in packaging design, through storytelling, visualization and other innovative means to show the unique charm and cultural heritage of the product. For example, detailed introduction and pattern design about the origin of the product, historical background, production process, etc. can be added to the package, so that consumers can feel the cultural connotation and added value of the product in the process of purchasing and using the product, thus enhancing the emotional resonance and identity of the brand. As shown in Figure 2, the logo of Apple cell phone is designed according to the different regional cultural characteristics of different logo extension logo.



Fig. 2. Apple logos in different cities

3.3 Promote Environmentally Friendly Packaging Materials

With the enhancement of environmental awareness and the concept of sustainable development, consumers have a growing demand for green packaging. Therefore, agricultural enterprises should actively respond to the call for environmental protection and prioritize the use of biodegradable, recyclable and other environmentally friendly materials for packaging design. This not only meets the consumers' pursuit of green life, but also highlights the enterprise's sense of social responsibility and brand image. At the same time, the government should introduce relevant policies to encourage and support agricultural enterprises to use environmentally friendly packaging materials, and promote the green development of the whole industry. Continuing this paragraph makes the whole paragraph more in line with the requirements of academic papers. As shown in Figure 3, the packaging form of the earth eggs, which is prepared by straw, is not only beautiful but also in line with the characteristics of the product.



Fig. 3. Packaging of earth eggs

3.4 Optimize the Information Transfer Method

Packaging as an important carrier of product information, its information transfer efficiency directly affects the consumer's purchase decision. Therefore, agricultural enterprises should focus on optimizing the information transfer mode of packaging, and improve the information transfer efficiency of packaging through reasonable layout, distinctive color matching and concise and clear copy design. At the same time, the information on the packaging must meet the requirements of relevant laws and regulations to ensure the authenticity and accuracy of the information, to avoid misleading consumers or generating unnecessary legal disputes. In addition, enterprises can also consider using modern technical means such as QR code to provide consumers with more convenient and rich product information access channels.

3.5 Focus on User Experience

The ultimate purpose of packaging design is to serve consumers, therefore, user experience should be highly emphasized in the design process [8]. Agricultural enterprises should give full consideration to factors such as convenience, safety and reusability of packaging to meet the actual needs of consumers. For example, they can design packaging structures that are easy to open and close, provide clear instructions and precautions for use, and ensure the convenience and safety of consumers in the process of use. At the same time, companies can also pay attention to the sustainability of packaging and encourage consumers to recycle and reuse packaging, thus enhancing consumer satisfaction and loyalty. As shown in Figure 4.



Fig. 4. Chu orange brand packaging

If the above five principles can be achieved, the packaging of agricultural products will get more attention from consumers, enhance brand awareness, and bring more economic benefits to the agricultural industry, promoting rural revitalization towards a more prosperous future.

4 Methods for Optimizing the Design of Agricultural Brand Packaging in the Context of Rural Revitalization

4.1 Digging Deep into the Regional Culture to Create a Differentiated Brand

Regional culture is the core and soul of agricultural product brand packaging design, which builds a deep emotional bond between the brand and consumers [9]. In order to fully demonstrate the charm of this culture, a professional team should be organized to go deep into the target area, through fieldwork, in-depth interviews and literature collection and other diversified methods, to comprehensively excavate and refine the representative historical and cultural symbols and visual elements. In this process, the most local and easily understood and accepted cultural elements, such as traditional patterns, local colors and folklore symbols, should be carefully selected. In packaging design, should uphold the differentiation strategy, to avoid homogeneous competition, through a unique design style, innovative combination of elements and distinctive color contrast, shaping a unique brand image, so that the product stands out in the fierce market competition, unique.

4.2 Focus on the Practicality and Functionality of Packaging Design

Agricultural packaging design needs to take into account the aesthetics and practicality, aimed at protecting the product, extending the shelf life and facilitating transportation and storage to meet consumer demand. It is recommended to use biodegradable, recyclable and environmentally friendly materials, such as paper, bamboo fiber, corn starch and other bio-based materials, in response to the national environmental policy and show corporate social responsibility. At the same time, the packaging structure design

should be optimized, according to the characteristics of agricultural products and transportation needs, the use of reinforced structures or air-conditioned packaging and other technologies, to ensure the integrity of the product and ease of use for consumers. In addition, interactive elements such as QR codes and social media links can be added to the packaging to provide detailed information about the product and enhance consumer participation and brand loyalty through activities such as code-sweeping lucky draws and sharing experiences.

4.3 Strengthen Brand Story and Emotional Connection

As a bridge connecting products and consumers' emotions, brand story plays an important role in enhancing brand identity and sense of belonging. In order to create a warm and humane brand of agricultural products, it is recommended to carefully plan the brand story around the characteristics and advantages of the product to ensure that the content is true, vivid, interesting and can trigger consumer empathy. At the same time, the key elements of the brand story should be integrated into the packaging design, showing the unique charm and humanistic value of the product through illustrations and copywriting, forming a unified brand image. In addition, a combination of online and offline methods should be used to promote the brand story in an all-round way, online use of social media for dissemination and interaction, and offline through the setting of the experience area to allow consumers to experience the quality of agricultural products and brand culture, thus further deepening the consumer's awareness of the brand and emotional connection.

4.4 Promote the Development and Application of Intelligent Packaging Technology

Intelligent packaging technology, relying on the Internet of Things, big data, artificial intelligence and other cutting-edge technologies, has injected new vitality and development opportunities for the agricultural packaging industry. The technology not only realizes the product traceability management, anti-counterfeiting identification, sales management and other multiple functions, but also significantly improves the product quality control and market supervision capabilities, effectively protect the rights and interests of consumers. In view of this, it is recommended that the industry pay close attention to the development trend of intelligent packaging technology and application cases, actively participate in relevant industry conferences and exhibitions, in-depth exchanges with industry experts and learning, in order to keep abreast of new technologies, new materials, new processes. At the same time, representative agricultural products should be selected to carry out intelligent packaging pilot demonstration projects, through the actual application to assess the technical effect and market response, for the subsequent promotion of accumulated experience and data support. In addition, strengthen cooperation with universities, research institutions of production, learning and research is also essential, joint research and development of intelligent packaging technology and products more in line with the characteristics of agricultural products, make full use of the resources and advantages of all parties to promote technological

innovation and transformation of achievements, and help the intelligent upgrading of the agricultural packaging industry.

4.5 Government Guidance and Policy Support

The government plays a key role in promoting the optimization of agricultural brand packaging design [10]. By formulating special policies, providing financial support and strengthening market supervision and other multi-dimensional measures, the government can effectively guide and incentivize agricultural enterprises to actively participate in the optimization and design of brand packaging, and thus promote the overall improvement of agricultural brands and the healthy development of the market. Specifically, the government should formulate a clear special policy for the optimization and design of brand packaging for agricultural products, establish development goals, key tasks and safeguard measures, and through the establishment of a special fund or project for agricultural enterprises to provide strong support for brand packaging innovation and technological upgrading. At the same time, through the establishment of a special fund or provide financial subsidies and other ways to further reduce the innovation cost of enterprises, to stimulate their innovation enthusiasm. In addition, the government also needs to establish and improve the market supervision system of agricultural packaging, increase the supervision and inspection of packaging materials, design quality and other aspects, in order to ensure the healthy and orderly development of the market, crack down on counterfeit and shoddy products, and effectively protect the rights and interests of consumers and brand image.

5 Summary

Based on the perspective of regional culture, this paper discusses in depth the optimization of packaging design of Qixia apple agricultural product brand. Against the background of increasingly fierce competition in the global agricultural market, it firstly emphasizes the importance of regional culture as a resource for brand differentiation, and points out the challenges faced by the optimization of brand packaging of Qixia apples. Through systematic literature review and case analysis, the article comprehensively analyzes the related theories and practices of regional culture and brand packaging of agricultural products, and then identifies key issues such as weak design consciousness, missing cultural elements, insufficient application of environmentally friendly materials, and inefficient information transmission, etc., with respect to the current situation of Qixia apple industry and brand packaging. The innovation of the article is that it proposes a set of comprehensive optimization strategies, including strengthening brand design awareness, exploring regional cultural elements, promoting environmentally friendly packaging materials, optimizing information transfer and focusing on user experience, aiming to significantly improve the brand recognition and market competitiveness of Qixia apples, and thus accelerate the implementation of the rural revitalization strategy. This study not only provides theoretical and practical guidance for the brand construction of Qixia apples, but also provides valuable references

for the optimization and upgrading of the brands of other agricultural products with regional characteristics, showing high academic value and practical significance.

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