# Research on Packaging Design of Cultural Travel Products from the Perspective of Digital Technology

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**Abstract:** This study aims to explore the application of digital technology in the packaging design of cultural travel products to meet the growing consumer demand and market competition. Through the effective application of digital technology in the packaging design of cultural travel products, the innovation of product packaging, personalized customization ability and user experience can be improved, so as to enhance the market competitiveness of products. This study first analyzed the current application status of digital technology in packaging design of cultural travel products, and then discussed the specific application points of digital technology such as AR and VR in packaging design on this basis. Finally, through case analysis and product display, the practical application effect of packaging design of cultural travel products from the perspective of digital technology was expounded. It is hoped that this study can provide reference and reference for the digital transformation in the field of packaging design of cultural and tourism products, and promote the sustainable development and innovation of the industry.

**Keywords:** Cultural travel products; Digital technology; Package design

With the rapid development of science and technology and the continuous upgrading of consumer demand, cultural tourism products increasingly highlight the importance of their packaging design in the market competition. The rapid popularization and application of digital technology has brought new opportunities and challenges to the packaging design of cultural travel products. This study aims to explore the practical application of digital technology in the packaging design of travel products from the perspective of digital technology, so as to tap the potential of digital technology in improving the innovation, personalized customization and user experience of packaging design of travel products.

## 1. Basic overview of digital technology

Digital technology refers to the technology that uses digital means to collect, transmit, store, process and display information. It includes computer technology, network technology, communication technology and other technical means. With the in-depth development of information and intelligence, digital technology is playing an increasingly important role in various fields. In the packaging design of cultural tourism products, digital technology can realize the virtual display, personalized customization, interactive experience and other functions of product packaging through virtual reality (VR), augmented reality (AR), artificial intelligence and other technical means, and inject more innovative elements and experience value into cultural tourism products. Through digital technology, the packaging design of cultural and tourism products can be closer to consumer demand and enhance the added value and competitiveness of products [1]. Therefore, strengthening the study and application of digital technology is of great significance to the packaging design of cultural and tourism products.

## 2. Application status of digital technology in packaging design of cultural tourism products

The present situation of the application of digital technology in the packaging design of cultural and tourism products is increasingly diversified and extensive. First of all, with the continuous maturity of AR (augmented reality) and VR (virtual reality) technology, more and more cultural travel product packaging design began to adopt these technical means, by providing virtual experience and interactive functions, so that consumers can more intuitively perceive the characteristics and value of the product. Secondly, digital

technology has realized personalized customization in the packaging design of cultural travel products. Through data analysis and intelligent algorithms, designers can design unique packaging solutions for each product based on consumer preferences and needs. In addition, digital technology also promotes the deep integration of packaging design of cultural travel products with online shopping, social media and other platforms to improve the online display effect and user experience of products [2]. In general, digital technology has become an important driving force for packaging design of cultural and travel products, bringing more innovation possibilities and business opportunities to the industry.

## 3. Digital technology design cultural tourism product packaging value

First of all, digital technology can enhance the innovation and artistry of packaging design, through virtual reality, augmented reality and other technical means, designers can create a more interactive and immersive packaging design, so as to enhance the attractiveness and competitiveness of products. Secondly, digital technology can also achieve personalized customization, through big data analysis and intelligent algorithms, designers can tailor unique packaging solutions for each product according to consumer preferences and needs, making products closer to consumer needs. In addition, digital technology has also improved the practicality and functionality of packaging design, such as the use of wearable devices, smart phones and other technologies, designers can create interactive packaging design, to bring consumers a more convenient experience. In general, the application of digital technology gives more possibilities and flexibility to the packaging design of cultural travel products, and provides strong support for the enhancement of added value of products and the optimization of consumer experience.

## 4. Application points of AR digital technology in packaging design of cultural travel products

### 4.1 Clear design background

In the application of AR digital technology in the packaging design of cultural travel products, the design background is very important. Designers need to fully understand the market positioning, target audience and product characteristics of the product to determine how to use AR technology to improve the effect of product packaging design [3]. This involves an in-depth analysis of the market environment in which the product is located, including the situation of competitors, the changing trend of consumer demand, etc., to ensure that the application of AR technology can match the market demand. At the same time, designers also need to understand the development status and feasibility of AR technology to determine how to reasonably integrate AR technology in the design, so that it is consistent with the design goals of product packaging. Only after fully understanding the situation of products and AR technology, designers can develop a more suitable design scheme, so that the application of AR technology in the product packaging design to play the best effect.

### 4.2 Analysis of design positioning

The analysis of design positioning is crucial in the application of AR digital technology, and designers need to think deeply and understand the purpose of product packaging design to determine the positioning of AR technology in it. Specifically, designers need to clarify whether AR technology is used as a display medium for product information, as a new form of brand promotion, or to enhance the user experience. This requires a clear understanding of product positioning and market demand, combined with the characteristics of AR technology, and integrated into the overall design [4]. By fully analyzing the design positioning, designers can better plan and execute the application of AR technology in packaging design to ensure that AR technology is closely aligned with the design objectives and achieve the desired results. The analysis of this step helps to ensure the rational use of AR technology in packaging design, so that it can better serve the overall design concept of product packaging, so as to bring a truly beneficial experience to users. Therefore, the analysis of design positioning is crucial in the application of AR technology to ensure that the final design effect meets the expected goals, thus enhancing the attractiveness and competitiveness of product packaging.

### 4.3 Description of the design process

The design process includes the application process of AR digital technology in the packaging design of cultural travel products. From the selection of AR technology to the determination of application methods, to the process of specific design and execution, it needs to be clearly planned. First of all, designers need to clearly choose the appropriate AR technology type, such as token-based AR technology or spatial location-based AR technology, according to the product characteristics and user experience needs to make decisions. Second, determine how the AR technology will be applied, including whether to trigger AR effects by scanning specific ICONS or by identifying specific scenes. Next, the designer needs to plan the steps of technical implementation in detail, including software development, content production, etc. [5]. At the same time, it is also necessary to consider the resources, staffing and time

required to ensure the smooth execution of the design process. Through a clear design process, designers can better organize and manage the entire AR technology application process, and maximize the effect and role of AR technology in the packaging design of cultural travel products.

## 4.4 Evaluation of design effect

The evaluation of design effect is a crucial part of the entire AR digital technology application process. Through the evaluation of the actual AR technology application effect, the design effect can be comprehensively evaluated through prototype demonstration, user testing and other ways. This evaluation can help designers find problems and correct them in time, so as to ensure that AR technology can be applied in the packaging design of cultural travel products to achieve the best results. When evaluating, it is necessary to consider aspects such as user experience, interaction effect, and clarity of information transmission to ensure that the design effect meets the expected goal. Through timely evaluation and feedback, designers can quickly adjust the design scheme, correct and optimize the potential problems, and then improve the application effect of AR technology in the packaging design of cultural travel products [6]. This step can also provide valuable experience and lessons for future design, and provide an important reference and reference for improving the application effect of AR technology in packaging design. Therefore, the evaluation of design effect is a key step to ensure the maximum application effect of AR technology.

## 4.5 Packaging design product display

Through product display, designers can vividly show the visual impact characteristics of AR technology, so that the audience can experience a new visual experience. This way of display can deeply show the information and cultural connotation conveyed by the product, and bring more profound experience and understanding to the audience. At the same time, the product display also provides a valuable case reference for the future packaging design, so as to promote the practical application effect and case analysis of AR technology in the packaging design of cultural travel products. Feedback and audience interaction during the display process can also provide designers with real-time opinions and suggestions to help continuously optimize and innovate the application of AR technology in packaging design. Through product display, the application effect of AR technology in the packaging design of cultural travel products can be fully demonstrated, injecting new vitality into the digital transformation of the industry and the innovative development of packaging design, while providing valuable experience and inspiration for designers and related fields.

## In Summary:

From the perspective of digital technology, this paper studies the application of digital technology in the packaging design of cultural travel products. By analyzing the current status of digital technology in the packaging design of cultural travel products, and discussing the specific application points of digital technology such as AR and VR in packaging design, the purpose is to provide new ideas for the digital transformation and innovation of the industry. Through the research of this paper, the potential and application prospect of digital technology in the packaging design of cultural and travel products are more deeply recognized, which points out a new direction for the development of the industry.

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