Research on Immersive Experience of Rural Tourism Marketing in the Internet Era

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Abstract: In the era of the Internet where big data, artificial intelligence technology, and new media technology are rapidly developing, regional rural tourism industries and scenic spots have also begun to fully utilize the interactive media of online big data, integrate rural natural landscape resources and cultural resources, and develop online media tourism marketing models with interactive dissemination attributes. Design tourism brand marketing and dissemination such as "tourism+live streaming", "tourism+new media advertising", and "tourism+e-commerce" to drive the sales and promotion of tourism landscapes, culture, and tourism products in the region. From the perspective of "immersive experience" in rural tourism, a comprehensive tourism marketing service promotion model is established based on new media technology and VR&AR virtual reality technology. Weibo, WeChat, and live streaming platforms are used as online marketing channels to develop and create immersive technology parks and offline virtual experience spaces for different tourism audiences. Rural tourism brands, tourism products, and services are displayed and promoted, and rural tourism guidance and service models are innovated. Enhance the influence of tourism marketing and promotion.

Keywords: Internet era; Immersive experience; Rural tourism marketing; Innovation strategy.

1. INTRODUCTION

Virtual reality experience tourism, as a popular tourism promotion service project in recent years, has advantages in three-dimensional, real-time interactivity, and immersion. Relying on 3DsMax, SketchUp software modeling technology, as well as digital map tools such as GIS geographic information system, Google API web system, Google Maps & Earth, it can create a more realistic and visually impactful 3D virtual image space. Provide an immersive and immersive viewing experience for tourism audiences of different age groups. Design tourism marketing plans tailored to tourists' tourism habits and personal preferences, integrating tourism resources and product development, brand building into the setting of virtual reality spaces, integrating mobile technology to improve and upgrade the content and presentation of marketing promotion, enhancing tourists' situational awareness and interactive communication experience in tourism virtual spaces, and achieving the goals of rural tourism industry service direct sales and software marketing construction.

2. RURAL TOURISM "TOURISM+" ONLINE MARKETING AND MARKETING MODEL BASED ON INTERNET TECHNOLOGY

2.1 Internet marketing and communication model of "tourism+live streaming"

Since the popularity of short video information media in 2016, different industries have adopted Tiktok, Kwai and other live broadcast platforms for business promotion. Compared to traditional television advertising marketing, the new marketing model mainly based on live streaming by anchors is more innovative and covers a wider audience. Especially, live streaming marketing, which focuses on indoor physical goods and outdoor tourist attractions, can present richer information content and more realistic scenes in a unit of time, making it easy for the ordinary group to have an immersive and immersive viewing experience[1]. The current "tourism+live broadcast" mode of rural tourism marketing makes more use of Tiktok, Kwai, online tourism platforms and other live broadcast channels to bring more authentic and comprehensive explanations of natural landscapes, cultural attractions, and tourism products to the audience. Through the interaction between live broadcast communities and users, it is helpful to tap potential tourism consumers and stimulate the purchase intention of tourism services of users participating in live broadcast.

2.2 The marketing model of "tourism+new media advertising"

Advertising marketing in the era of new media on the Internet belongs to a reverse marketing model, which uses big data technology to observe users' intelligent terminal browsing situation, and makes precise marketing based on different users' product and service needs and personal preferences. Compared to traditional marketing models
such as large-scale advertising and news public relations, new media advertising marketing has lower actual costs and higher customer conversion rates. The new media advertising marketing of rural tourism is usually based on software platforms such as news clients and search engine apps to place advertisements. The big data cloud service platform is used to analyze the number of times different users view advertising images, images, and videos, accurately push tourism marketing information to target users at specific time points, analyze the tourism marketing effects under different tourism marketing content and promotion methods, and improve the brand awareness of rural tourism Transaction rate of tourism products and services[2].

2.3 The Network Marketing Communication Model of "Tourism+E-commerce"

With the popularity of rural "group tour" projects, rural tourism in various regions has attempted to use e-commerce platforms such as Taobao, JD.com, and online tourism websites to increase the combination marketing mainly focused on "marketing promotion=sales". Typically, rolling advertisements, storefront display spaces, and product purchase spaces are set up on e-commerce portals to achieve systematic marketing of different tourism products and project services. However, due to the shopping nature of e-commerce websites, although rural tourism marketing can attract more audiences through low prices, the actual interaction and conversion rate of tourism marketing are insufficient. Therefore, some rural tourism groups have begun to adopt a comprehensive marketing model of "tourism+e-commerce+live streaming", inviting internet celebrities and well-known anchors to participate in marketing promotion, and achieving good marketing communication in specific operations Marketing customer order conversion effect.

3. CONSTRUCTION OF IMMERSIVE CONTEXTUAL EXPERIENCE SPACE FOR RURAL TOURISM "TOURISM+VIRTUAL REALITY" MARKETING ※※ TAKING REGIONAL RURAL TOURISM AS AN EXAMPLE

※※ The rural area is located in the plain river and lake area, with rich natural ecological landscapes, cultural landscapes, and red tourism landscapes. The village covers an area of about 3 square kilometers and has been recognized as an advanced village in the construction of civilized villages and towns, a national level demonstration village for rural modernization, a national democratic and legal governance demonstration village, and a national level ecological village. Due to its location in the plain river and lake areas in the east, ※※ The village, relying on the natural advantages of its surrounding ancient and rustic residences, wetland landscapes, industrial parks, and forest parks, with the theme of "new countryside, new tourism, new experience, and new fashion", has invested over 100 million yuan to establish tourist spaces such as animal viewing areas, exhibition areas, picking areas, amusement areas, and student social practice areas. Every year, it attracts more than 200000 tourists and creates a stable income of 28.5 million yuan for village level tourism, becoming a national agricultural tourism demonstration point National key rural tourism villages. [3] At the same time, village tourism development companies are gradually introducing virtual reality technology to increase the promotion of rural tourism landscapes, tourism products, and services.

Based on 3DsMax, SketchUp software modeling technology, as well as digital map tools such as GIS geographic information system, Google API web system, Google Maps & Earth, a virtual rural tourism scene for tourists has been established. Build virtual models of mountains, rocks, flowers, courtyards, pavilions, corridors, wetlands, streets, picking gardens, zoos, amusement parks in CSV file format, complete operations such as geometric model modeling, texture mapping, model export, etc. Place the model in the accurate position of the virtual space according to the proportion of physical objects; Utilizing GIS geographic information system and Google Earth digital map tools to capture aerial videos of selected rural tourism spatial ranges, and using Google Sketchup plugin tool to "fine model" the virtual landscape environment, a rural tourism virtual tourism space with 360 degree panoramic viewing is constructed.

On this basis, a virtual interactive tourism client APP for tourists is developed based on Web 3D technology and B/S (browser/server) architecture. The graphical operation interface includes initialization window, search bar, menu bar, dialog box, window, etc. The web browser service interface is supported by HTML hypertext language and HTTP transmission protocol. Users only need to enter their username and password to log in to the system platform and wear VR glasses. Wearing spatial perception equipment allows you to enter the virtual scene for tourism and sightseeing.
4. RESEARCH ON IMMERSIVE EXPERIENCE MARKETING SCHEMES FOR RURAL "TOURISM+VIRTUAL REALITY" IN THE INTERNET ERA

4.1 Design of the "Virtual Immersive Experience" Scheme for Rural Tourism Landscape Tourism Marketing

The tourism marketing promotion of rural natural ecological landscapes, cultural landscapes, and red tourism landscapes should add an experiential marketing plan of "virtual reality scenes" beyond the internet direct sales model, so that tourists can experience the natural ecological environment and cultural landscape scenes of the tourism destination through wearing VR & AR devices, and stimulate more tourists' enthusiasm for tourism participation and tourism landscape intention.

The current virtual marketing solutions for tourism landscape tourism typically include modules such as loading tourism area maps, initializing scenes, and retrieving tourism information. Each module is responsible for implementing different tourism landscape marketing services[4]. Map loading is the basic part of the entire virtual tourism marketing, based on software and hardware such as web browsers, Google Maps & API tools, Google servers, etc. It can display the tour routes of rural tourism in virtual scenes, including driving or bus routes, tourist attraction locations, and introduction of tourist attraction information, providing support for different tourists' virtual scene roaming; Scenario initialization is mainly achieved by sending data from a web browser to a Google server for reading. After the backend server responds, it automatically loads and initializes the tourism scene, assisting users in participating in immersive roaming experiences of different landscapes; Tourism information retrieval is based on JavaScript script settings, search service components, and LocalSearch controls. It searches for tourism information resources stored on backend servers according to user needs and adds the search results to the options message request object, in order to recommend tourism projects to tourists.

4.2 Design of the "Virtual Immersive Experience" Scheme for Rural Tourism Product Marketing

The village mainly has characteristic tourism products such as organic rice, grass chickens, rice ducks, free-range geese, and eel. The traditional internet advertising placement method for product marketing incurs high investment costs and poor results. However, the design and application of "immersive" marketing schemes based on virtual scenes can compensate for the insufficient experience of tourist groups in tourism products.

Modeling a series of virtual characters in the virtual reality space scene, led by virtual tour guides, specialty sellers, picking administrators, and other virtual characters, using "virtual video+sound control technology" to recommend different tourism products to tourists. The virtual character image of simulated animation is more approachable, and it is easier to attract the attention of the target audience in tourism product recommendations and problem interactions in virtual scenes. It can even dynamically decompose tourism products into components such as packaging, physical objects, and material components, allowing tourists to understand and experience the original ecology and regional characteristics of rural tourism products through multiple visual, auditory, and tactile sensations, bringing new traffic and attention to tourism product marketing, and enhancing the visibility of rural tourism brands.

4.3 Design of the "Virtual Immersive Experience" Scheme for Rural Tourism Service Project Marketing

The marketing of tourism projects such as animal and plant viewing in rural tourism, agricultural or industrial exhibitions, agricultural picking, and leisure activities can be achieved through the establishment of physical spaces such as tourism technology parks and tourism virtual experience venues. Especially for urban tourists who are not familiar with the rural environment, guided by professional tour guides to enter tourism technology parks, tourism virtual experience venues, wear VR glasses, and spatial perception equipment to participate in immersive experiences of tourism service projects. This can effectively integrate multiple elements of tourism projects, tourism culture, public service facilities, and develop tourism project marketing strategies that are suitable for the preferences of the target audience. Hang posters and brochures for tourism project marketing in virtual spaces, engage in virtual space experience interaction and problem communication with tourist groups, solve the problems encountered in the "virtual immersive experience" of tourism projects, and make rural tourism project marketing closer to tourists' psychological awareness, emotions, and value demands.

4.4 Design of the "Virtual Immersive Experience" Scheme for Rural Tourism Promotion and Marketing
The innovation of rural tourism promotion and marketing models in the Internet era not only requires the introduction of new media marketing solutions mainly based on graphics and text, live short videos, and micro videos, but also based on VR&AR virtual reality technology, tourism technology parks, virtual tourism experience venues and other software and hardware, providing virtual tourism marketing services for online tourists, and conducting scene marketing of different rural tourism landscapes, tourism products, and services. Enhance the attention and participation of young tourists in rural tourism[5].

Led by virtual guides and virtual tourism assistants in venues or exhibition halls, virtual picking festivals, virtual starry sky music festivals, and virtual tourism promotional activities will be held, and virtual tourism promotion information will be released on Weibo, WeChat, Tiktok and other platforms to attract online audiences to enter virtual interactive tourism client APP, offline tourism virtual experience venues, and participate in virtual parent child agricultural product picking activities, virtual music festival singing activities. Virtual tour guides and anime characters explain rural tourism landscape culture, tourism characteristic agricultural products, and tourism cultural and entertainment activities in virtual scene activities, providing personalized tourism guidance and promotion services for young tourists, establishing a positive and good tourism brand image, and helping to enhance the influence of regional rural tourism marketing and tourism economic benefits.

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The "immersive experience" marketing and promotion of tourism services in the rural tourism industry play a crucial role in the networked development of modern tourism. On the basis of existing internet marketing and communication models such as "tourism+live streaming", "tourism+new media advertising", and "tourism+e-commerce", relying on VR&AR virtual reality technology, geometric modeling technology, and geographic information positioning technology, we have built virtual space experimental venues for rural tourism, attracting target customer groups to watch virtual landscapes and experience virtual service projects, which helps to expand tourism marketing and service models Deepen the immersive tourism experience of tourists and achieve the goal of precise marketing and economic value orientation in rural tourism.

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