Study on the Development Path of Digital Integration of Red Culture and Rural Tourism

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Abstract: Under the situation of rapid development of digital economy, it is important to scientifically grasp the new stage of red tourism development, promote the deep integration of digital technology and red tourism industry, undertake new demand, promote new consumption and obtain new momentum for development, and become an important path for the high-quality development of red culture and tourism. Using system theory, build a matrix for the integration of rural tourism industry development elements and red culture building elements, form digital integration points, and create digital integration products of red culture and rural tourism. In the digital integration development, by creating a sense of integration novelty, highlighting the sense of integration immersion, and enhancing the sense of integration context, the new digital cultural experience of the integration of red culture and rural tourism is opened, and the new pattern of red cultural tourism development is accelerated.

1. Introduction

Red culture is an advanced culture with Chinese characteristics generated during the long-term revolutionary practice and socialist construction. [1] Promoting red culture, manifesting the revolutionary spirit, enhancing the connotation of red culture and its spiritual qualities and characteristics of the times is a strategic initiative to promote cultural prosperity and a major project to strengthen education on revolutionary traditions. It is a major project to strengthen patriotic education, ideological and moral construction and revolutionary traditional education. Red tourism can "enhance the image of the countryside, stimulate rural economic development, and promote the revitalization of rural culture" [2], and realize "the transformation of tourists' recognition, acknowledgement and identification of the brand value of red culture and tourism to resonance" [3]. A large number of existing red culture and red heritage in China are mainly located in the old revolutionary areas and villages. The red cultural tourism resources in the old revolutionary areas are unique, diversified and scattered. [4] The good ecological environment in the villages of old revolutionary areas also provides the natural background for the development of red tourism. Red cultural resources to build a rural tourism platform is a "breakthrough" in the implementation of the rural revitalization strategy and a "trigger point" for tourism in the new era [5]. We should highlight red culture in rural tourism development and pay attention to the positive significance of red tourism resources development [6].
The integration of red culture and rural tourism has inherent advantages, and "promoting the integrated development of culture and tourism, developing red tourism and rural tourism" [7] has become an important trend in the future development of cultural tourism. The integration of red culture and rural tourism is an innovation of the current trend of cultural tourism integration, the integration of "red and green", promoting the activation of red tourism resources, allowing tourists to visit red sites, review the history of the revolution and remember the revolutionary martyrs in the experience of countryside life. At present, there are only a few research results on the integration of red culture and rural tourism, and some scholars found that there is insufficient integration between red culture value and tourism industry in the development of red tourism [8], most scholars only explore the development of red tourism from the perspective of rural revitalization strategy [9-10], and seldom pay attention to and explore the path of integration between red culture and rural tourism, especially the digital integration path. High-quality development of red culture and tourism is an important part of the integrated development of culture and tourism, and "digital technology is an important driving force to promote tourism innovation and high-quality development" [11]. Relying on digital transformation, it promotes the expansion of red cultural tourism to digital space, deepens cross-border cross-domain integration and innovation, accelerates the transformation of red cultural resources from the value of cultural relics to the value of cultural tourism, and effectively realizes the high-quality development of red cultural tourism. Digitalization can turn the abstract red culture into a red memory space with content, carrier and continuity, and can "string" the scattered red cultural elements and rural tourism resources in the rural physical space, build a new scene for cultural tourism consumption, enhance the fit between red cultural resources development and rural tourism industry development, and meet the needs of both This paper focuses on the new expectations of tourists for red culture and rural tourism, and gives new connotation to the development of red culture in old revolutionary areas and rural revitalization. This paper explores the integration of red culture and rural tourism, focusing on the product development path of digital integration of rural red tourism, promoting effective docking between red cultural tourism resources and modern consumer demand, deepening the supply-side structural reform of rural cultural tourism, and stimulating the consumption potential of rural cultural tourism.

2. Prominent problems of red cultural tourism development

At present, the development state of China's red cultural tourism industry is still mostly stuck in the "talk, see" level of sightseeing, and "participation, experience" of the interactive level is less, the urgent need to use new technology to enrich the product display content, optimize the experience effect, into the scene It is urgent to use new technology to enrich the way of displaying products, optimize the experience effect, integrate the scenario thinking, come out from the traditional sightseeing and educational tour of museums, memorials and memorial sites, and plan the cultural tourism products with immersive experience.

2.1 Cultural tourism products do not have a strong sense of experience

At present, teenagers and young people groups gradually become the "main force" of the red tourism market [12]. There are not many cultural tourism products combining red tourism with slow travel to the countryside, and the revolutionary history atmosphere is single and lacks novel highlight features. There is a lack of attraction and influence among the younger generation. Red tourism is in a development stage with favorable policy and market in both directions, but there are also bottlenecks in development. Most of the red tourism attractions are mainly in the "cultivation of internal strength", focusing on the excavation of the historical and cultural connotations of the attractions themselves, while in the form of publicity and display mostly in the form of windows,
physical objects and other static presentation is more traditional, appearing relatively boring, limited participation of tourists, which affects the experience effect.

2.2 Weak foundation for digital transformation

At present, digital resources in the cultural tourism industry are mostly scattered and fragmented naturally generated data and information resources. They are not consciously and effectively transformed into production factors of cultural tourism, cannot flow freely, and cannot form a full chain, multi-directional and multi-dimensional embedding and integration between other production factors, and are difficult to form data-centered productivity. This despite the fact that there are already many enterprises doing the work related to the collation of data elements, but on the whole, there is still a lack of the foundation of the digital transformation of cultural tourism, and there is still a small gap from the digital development.

2.3 Poor integration of digital technology

Promoting digital technology and cultural tourism industry technology and production methods integration synergy, need to effectively promote the cultural tourism industry main organization change. Production scene process transformation and enterprise organization change is the core and key of digital transformation. Most of the rural cultural tourism enterprises are not sensitive to digital technology, and most of them lack deep experience and insight into cultural content, industrial ecology, cultural tourism market, cultural tourism consumer behavior psychology, technical technology, service experience and other cultural tourism industry production methods and hidden knowledge, so it is difficult to actively integrate their long-term development of content and services with the new generation of information technology, and it is difficult to meet the data-based It is difficult to meet the needs of data-based business process reconstruction and enterprise organizational change.

3. Red culture and rural tourism digital integration point creation

The fusion of rural tourism and red culture is carried out in three stages: dimensional division, fusion matrix construction and fusion point identification, in which finding the fusion point is the key to the fusion process, and fusion dimensional division is the premise of building the fusion matrix. The fusion matrix is to further clarify the direction and content of the fusion on the basis of the system fusion established, and the formation of the fusion matrix provides the basis for the formation of the fusion point. Through the digital fusion point to build a new scene of digital cultural consumption, a new experience of digital fusion of red culture and rural tourism is generated. Rural tourism and red culture can provide practical guidance for integration path selection by building integration matrix and creating integration points.

3.1 Systems theory of integration

The system is formed by the combination of several independent elements that exist in a certain environment with interconnection, interaction and interdependence to form an organic whole with specific structure and function [13]. The red culture system and the rural tourism industry system form continuous innovation by reorganizing, reconstructing and reoptimizing in the process of system integration. Through system analysis, the structure, function and environment of the two systems of red culture and rural tourism industry can be defined, and the constructive relationship of their integration can be further elaborated. The fusion of rural tourism and red culture is a process in
which culture and tourism intersect and interpenetrate to produce new industrial element forms.

### 3.2 Fusion matrix construction

Through the fusion matrix, the "fusion point" content of the fusion system can be comprehensive. Through the subdivision of two dimensions of red culture and rural tourism, the fusion matrix of rural tourism industry development elements and red culture elements is constructed. The vertical axis of the matrix is the red culture elements, and the horizontal axis of the matrix is the rural tourism elements. The red culture elements in the matrix mainly include revolutionary sites, revolutionary deeds, red film and television, red education, etc., and the rural tourism elements mainly include rural tourism, rural leisure, rural experience. The construction of the fusion matrix clarifies the fusion focus for the fusion development of red culture and rural tourism industry, and the basic side of the fusion matrix covers the core content of the fusion of both.

### 3.3 Digital integration point creation

The fusion system formed by red culture and rural tourism industry depends on the fusion point, which is the basic constituent element of the fusion system and the combination of two fusion unit constituents. On the basis of the establishment of the integration matrix, the direction and content of digital integration are clarified, and the integration point is gradually generated through exploration and innovation. The digital integration integration point is examined from both the vertical and horizontal directions of the matrix, and the digital integration point is formed by integrating the elements of red culture and rural tourism with digital technologies such as holographic projection, virtual reality and 3D animation by means of the medium of products such as performing arts, exhibition, film and television, animation and cultural creation (Figure 1).

![Figure 1: Digital integration matrix and integration point of red culture and rural tourism elements](image)

The specific content of the fusion point includes rural red holographic memorial hall, revolutionary memory virtual town, rural red culture digital experience park, red tourism cloud village, rural red open-air theater, red live-action immersion performance, etc. Revolutionary Memory Virtual Town - with the theme of red relics and revolutionary deeds in the villages of old revolutionary areas, shaping the script to kill the characters and forming the plot system with scenario interaction, visitors can participate in the red drama interpretation through the substitution of characters and perceive the red culture in multi-dimensional space; Rural Red Holographic Memorial Hall - through interactive screens and augmented reality and other multimedia interactive technology, three-dimensional display of revolutionary figures, creating a living display space,
connecting historical time and exhibition hall space; rural red culture digital experience park - reshaping large red culture scenes, restoring events, multi-perspective progressive experience, creating "people swimming in the scenery" immersive experience, to create a combination of reality and reality red experience space; rural red immersive performance - in a specific space in the old revolutionary area rural, using sound, light, electricity and other elements, the revolutionary atmosphere, light and shadow, music and other elements with new technology implantation into the red performance project, creating immersive scenes, so that the audience can get a sensory experience interaction; rural digital military park-relying on the historical places of the old revolutionary areas, the integration of immersive virtual scene interaction, to create digital virtual military game experience project, so that visitors become a certain historical event "The first-hand experience" of a historical event, bringing an immersive scene experience.

4. Red culture and rural tourism digital integration development path

Digital technology empowering tourism can effectively improve the efficiency of the tourism industry, enhance the level of tourism experience, promote the change of tourism development, and inject new vitality and new momentum for the high-quality development of tourism. As red tourism enters a new stage of development, it is necessary to deepen the supply-side reform of red tourism, promote integrated development, strengthen product development and brand marketing, bridge rural tourism resources and red cultural and creative industries with digital technology, and jointly build an influential digital red cultural and tourism platform in the countryside.

4.1 Create a sense of integration novelty and innovative presentation forms

Promote the deep integration of rural tourism and red culture, expand the application of digital culture and tourism scenes, and do integrated innovation around hearing, vision, physical sensation and control. Explore boldly in digital enhancement, use digital technology to pry red culture creativity and local rural tourism resources, integrate new elements of digital technology experience, and contribute to the efficient integration of rural red culture and modern technology. Focus on using new technologies to discover and promote red culture, strengthen the application of digital technology in the field of rural culture and tourism, grasp the points of common feeling and knowledge, and realize creative transformation and innovative development. Promote the creative transformation and innovative development of red resources in the new development stage. Enhance the digital level of red culture development and promote the integration of tourism elements in the old revolutionary areas by enhancing the core competitiveness of red culture products with digitalization.

4.2 Highlight the integration of immersion, enriching the visitor experience

Accelerate the red tourism "new infrastructure", with VR, AR, 5G, AI, big data and other modern information technology, the development of diversified, regional characteristics of the experience-based tourism products, high-quality products and services to enhance the sense of participation and experience of tourists. Do a good job of creating technology, scenarios and experiences to create a full-factor, all-time, all-round red cultural tourism experience, extend the rural red tourism space, highlight the red cultural IP, and share digital dividends. Further increase the digitalization of red cultural resources, the wisdom of the red culture and tourism industry, and release the high efficiency of technology on the new development of red tourism.
4.3 Enhance the sense of integration context and restore unique scenes

Refine the core values of red culture, build stories, and enhance the integration of cultural thematization and consumer scenarios. Guide tourists to explore the journey with superimposed senses. Through a new penetrating and in-depth experience, linkage development with new models such as Internet tourism and smart tourism, new consumption scenarios are constantly created to meet consumption demands, inspiring the younger generation to have a more intuitive and in-depth experience of the glorious history of the Party, deepening their interest in this red revolutionary history and guiding them to "discover more, experience more. The program will deepen their interest in the history of the Red Revolution and lead them to "discover more and experience more". Through the scenario reproduction and propaganda education way to interpret the red spirit of the old revolutionary areas, with a strong sense of image and immersion, to create a very "immersive" entertainment experience, to promote the red cultural values in the interaction, dissemination of knowledge and enhance.

5. Conclusion and Discussion

Interactive and immersive tourism enriches the consumption scenarios of destinations and tourist attractions, expands visitors' recreation space, and digital means realize intelligent links with users, driving the integration of physical space and digital space of rural red cultural tourism. The development of red cultural tourism industry is an important way to revitalize the development of the old revolutionary areas and an effective link to consolidate the development achievements in the post-poverty eradication era. The new elements of digital experience are integrated in the new development stage to promote the creative transformation and innovative development of red resources. In practice, we follow the law of rural red culture and tourism development, combine the new development stage and high-quality development requirements, leverage digital technology to enhance the core competitiveness of red culture in old revolutionary areas, continuously innovate the comprehensive application scenarios of red culture and rural tourism to promote the integrated development of red culture and rural tourism, actively explore the path and mechanism of red culture and tourism to help get rid of poverty and get rich, help the revitalization of rural areas in old revolutionary areas, and meet people's demand for The new expectations of people for red culture infiltration and good tourism life in the countryside.

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