

Research on the Countermeasures of Cultural and Tourism + Artificial Intelligence to Improve Rural Revitalization in Guangxi

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Abstract: Under the wave of digital economy and artificial intelligence, the deep integration of cultural and tourism and artificial intelligence has become a new driving force for rural revitalization. This research focuses on cultural tourism + artificial intelligence to empower rural tourism, and brings a new experience to tourists by creating characteristic cultural tourism products and building a smart cultural tourism system. At the same time, the development of new agriculture has also provided new opportunities for rural revitalization. Facing the challenges of data security and technology application, this study proposes a solution. In addition, the responsibilities of multiple subjects in the integrated development are discussed to provide theoretical basis and practical reference for policy making. This study holds that the integration of cultural and tourism integration with artificial intelligence and new agriculture will inject new productivity into the transformation and upgrading of rural economy, explore a sustainable development path suitable for rural revitalization, and provide strong support for the realization of the goal of common prosperity.

Keywords: Cultural Tourism; New Agriculture; Rural Revitalization; New Quality Productivity.

1. Foreword

General Secretary Xi Jinping has pointed out that "the key to rural revitalization is industrial revitalization". At present, the digital economy is booming, and artificial intelligence technology is changing with each passing day, injecting new vitality into rural revitalization. How to deeply integrate "cultural tourism + artificial intelligence" and empower rural revitalization is a major topic that researchers in the new era must think deeply and actively explore. As an important engine of rural revitalization, rural tourism has rich cultural and ecological resources, but the traditional model has problems such as serious homogenization competition, insufficient tourist experience and weak industrial chain. The application of artificial intelligence technology can effectively solve these problems, such as intelligent tour guide, virtual reality experience, precision marketing and other ways to enhance the tourist experience and enhance the attraction of rural tourism.

Based on this research will be the party's major policies, stand on the overall height, deep analysis of the opportunities and challenges of cultural tourism + artificial intelligence to improve rural revitalization, and put forward targeted countermeasures and suggestions. In this regard, Research will be conducted from the following aspects: First, analyze the specific path of artificial intelligence technology to empower rural tourism, To discuss how to use artificial intelligence technology to create characteristic cultural and tourism products, Improve the tourist experience, Building a smart cultural and tourism system; Second, to study the challenges facing the development of cultural tourism + AI, Including data security, technology application, talent training and other issues, And put forward the corresponding solutions; Third, to explore the responsibilities and role of the government, enterprises, social organizations and other parties in promoting the development of cultural tourism +

artificial intelligence, Establish a mechanism for collaborative promotion, Promote the sound development of industries; Fourth, to put forward policy suggestions, To provide theoretical basis and practical reference for promoting cultural tourism + artificial intelligence, In order to contribute to promoting rural revitalization and promoting common prosperity.

2. Introduction

In recent years, China has paid more attention to the issues of agriculture, rural areas and farmers. Every step from the new rural construction to the rural revitalization strategy demonstrates the country's firm determination to agricultural and rural development. In 2022 the central file no. 1 emphasizes rural grassroots party organization leadership, strengthen grassroots governance, guarantee the country revitalization strategy implementation, aims to solve the deep problems of agriculture and rural areas, promote prosperous industry, ecological livable, local custom civilization, effective governance, rich life, promote agricultural and rural modernization, narrow the gap between urban and rural areas, achieve common prosperity.

In China's population proportion, the rural population accounts for a large proportion. As a major agricultural province, Guangxi still has a rural population of 22.4 million, and there are still 800 million rural people in China. Any agricultural problem related to agriculture, multiplied by China's grand population base, is a huge problem. Only by conducting research on agricultural development and increasing farmers' income, and broadening the channels for increasing farmers' income, and improving the income level of rural residents, can the huge rural population be happy. However, in the process of implementing the rural revitalization strategy, we are faced with some problems, such as the weak economic foundation, the single industrial structure, the need to improve the level of public services and

the shortage of talents. Guangxi's unique natural resources and rich cultural resources also provide unique advantages for the development of rural tourism, characteristic agriculture and other industries.

In the context of rural revitalization, the integration of culture and tourism and the application of artificial intelligence technology are particularly important. The integration of culture and tourism can not only help to excavate and inherit the rural culture, but also drive the rural economy through the development of tourism, and realize the effective integration and efficient utilization of rural resources. Artificial intelligence technology can provide strong technical support for rural revitalization. Through intelligent management, data analysis and other means, it can improve agricultural production efficiency, optimize rural governance, and improve the level of public services.

At present, the application research of the integration mode of "cultural tourism + artificial intelligence" in rural revitalization is still in the initial stage, especially for Guangxi and other areas rich in tourism resources, how to deeply integrate and promote rural revitalization still needs to be discussed in depth.

Therefore, this study aims to deepen the explore the integration mode of "cultural tourism + artificial intelligence", find feasible ways and methods for rural revitalization in Guangxi, enrich and develop the theoretical system of rural revitalization, and provide theoretical support for the application of the integration mode of "cultural tourism + artificial intelligence" in the field of rural revitalization. It provides theoretical support and practical guidance for the implementation of rural revitalization strategy in Guangxi, provides a series of operable practical methods for rural revitalization in Guangxi, and helps Guangxi rural areas to realize the all-round revitalization of economy, society and culture.

3. Literature Review

This study focuses on the problems and countermeasures of "culture and tourism + artificial intelligence" to improve rural revitalization, and summarizes the literature from three aspects: the integrated development of rural revitalization strategy, the application of artificial intelligence technology and the integration mode of "culture and tourism + artificial intelligence", in order to provide theoretical basis and practical reference for the research.

3.1. Rural Revitalization Strategy and Current Status of Rural Tourism in Guangxi

The rural revitalization strategy is a major strategic deployment for entering socialism with Chinese characteristics in the new era. Its core is to give priority to the development of agriculture and rural areas, and the goal is to achieve thriving industries, livable ecology, civilized villages, effective governance and a well-off life. Its main contents cover the revitalization of rural industries, talent revitalization, cultural revitalization, ecological revitalization and organizational revitalization, and emphasize the principles of reshaping urban-rural relations, consolidating the rural operation system, and deepening the structural reform of the agricultural supply side.

Guangxi has seized the opportunity of rural revitalization, actively promoted the quality improvement of rural tourism, implemented major projects, and laid a solid foundation.

However, the current development of rural tourism in Guangxi is still facing some problems, such as insufficient infrastructure, product homogenization, service level to be improved and weak brand effect, etc., which hinder the healthy and sustainable development of rural tourism economy. Therefore, solving these problems and promoting the high-quality development of rural tourism in Guangxi has become an important topic.

The concept of integrated development of culture and tourism emphasizes the deep integration of culture and tourism. By exploring the cultural connotation of tourism resources, the quality and attraction of tourism are improved, which plays a significant role in promoting rural revitalization. The integrated development mode of culture and tourism can effectively promote rural economic prosperity, cultural inheritance, image promotion, urban and rural integration and environmental protection and sustainable development. Its application value is reflected in: attracting tourists to invest, promoting rural industrial upgrading, injecting new vitality into the economy; protecting rural culture, enhancing residents' cultural identity and revitalizing rural culture; enhancing rural visibility and reputation, attracting more attention; promoting urban and rural exchanges, strengthening cooperation, promoting resource sharing and realizing common prosperity; paying attention to environmental protection, enhancing tourism sustainability, and realizing the harmonious coexistence of economic development and ecological protection. The integrated development model and experience of culture and tourism at home and abroad are worth learning from, For example, the Napa Valley Town in the United States takes the wine industry as the core, Deeply integrate culture and tourism, Create a unique brand image; European towns protect and pass on cultural heritage, Combined with the local natural scenery and folk customs, Create characteristic tourism products; The old town of Lijiang has attracted countless tourists with its long history, unique Naxi culture and magnificent natural scenery, Combining traditional culture with modern tourism, By holding folk culture activities, Let the tourists have a deep understanding of the unique folk culture in the region, And actively explore a new mode of cultural and tourism integration, Such as the comprehensive development model of "culture + tourism + business".

3.2. Application of Artificial Intelligence Technology in Rural Revitalization

Table 1. Application scenarios of artificial intelligence technology in agriculture, rural areas and farmers

Smart agriculture	Artificial intelligence helps precision agriculture, intelligent irrigation and pest forecasting, making farmland management more accurate and efficient.
Wisdom Tourism	Artificial intelligence has provided strong support for the development of rural tourism. The intelligent recommendation system recommends the most suitable tourist routes and scenic spots according to the interests, time and budget of tourists, and provides personalized services, such as intelligent tour guide, voice translation, etc.
Wisdom governance	The application of artificial intelligence makes rural governance more efficient and democratic. The intelligent decision-making system helps the government to accurately understand the actual situation of rural areas and formulate scientific and reasonable policies.

At present, artificial intelligence technology is in the

golden age of prosperity and development. It has made significant technological breakthroughs in data processing, image recognition, natural language processing and other fields, and has penetrated into many industries. Looking into the future, AI will be deeply integrated with big data, cloud computing and other cutting-edge technologies, promote the development of intelligent applications to a higher level, and is committed to improving user experience. Artificial intelligence is playing an increasingly important role in rural revitalization, especially in the areas such as smart agriculture, smart tourism and smart rural governance, as follows (Table 1).

3.3. Integration Mode of "Cultural Tourism + Artificial Intelligence"

The integration mode of "cultural tourism + artificial intelligence" refers to the application of AI technology to cultural tourism and improving the quality of tourism service and tourist experience through intelligent means. It covers the connotation of intelligent tourism service, digital resource management, personalized customization and so on, which is characterized by personalized service, intelligent management, interactive experience and convenience.

This mode has obvious advantages in rural revitalization, which can improve the quality of rural tourism services, promote industrial upgrading, and increase the income of villagers. Its application value is reflected in the promotion of rural economic, cultural and ecological revitalization, protection and inheritance of rural culture, and improve the level of rural governance. The theoretical basis of this model includes the theory of technology integration, user experience theory and industrial innovation theory, and shows the development trend of deeper intelligence, stronger interactivity, more efficient resource management and wider cross-border integration.

To sum up, the integration mode of "cultural tourism + artificial intelligence", with its unique advantages and values, is gradually becoming an important force to promote the rural revitalization and the innovative development of the cultural tourism industry, and its development trend also indicates the intelligent, personalized and diversified development of the cultural tourism industry in the future.

4. Qinhuangdao "Smart Tourism" Case Research and Analysis

With the rapid development of information technology, the rise of "smart tourism" brings new opportunities for rural tourism and promotes the transformation of traditional rural tourism to intelligence. Qinhuangdao, as the center of the Bohai Rim Economic circle, has rich tourism resources along the mountains and seas. While developing leisure tourism and ecological tourism, it vigorously develops rural tourism and actively explores the integrated development mode of "cultural tourism + artificial intelligence".

Qinhuangdao has a solid foundation for the development of rural tourism. It has built characteristic tourism brands such as "Beautiful Village" and "Colorful Qinglong", hosted the "Hebei Provincial Tourism Development Conference", and formed a comprehensive rural tourism experience tour brand integrating various functions such as leisure, sightseeing, entertainment and experience. Qinhuangdao has unique tourism resources, in "food, living, traveling and entertainment": local characteristics of Qinglong old tofu,

Dongjia baked whole sheep, Lulong sweet potato and other local dishes, as well as various forms of farmhouse; beidaihe art village characteristic home stay, rural characteristic hotel; characteristic town boutique route, Shimen Village landscape village; high rock climbing, fruit picking and planting, field development group building and other activities. Qinhuangdao rural tourism has developed into a comprehensive form of seeing flowers in spring, drifting in summer, picking in autumn and skiing in winter.

The Qinhuangdao Qnlv smart tourism cloud service platform is shown as follows. The platform, built in 2017, mainly consists of a smart tourism portal, a smart tourism service platform, a smart tourism marketing platform and a smart tourism management platform, as well as a tourism big data center. In 2019, the platform launched 1,005 tourism products, with 544,000 orders, 1.286 million tourists served, and the platform flow of 71.22 million yuan. Qinhuangdao rural tourism successful experience is the main reason to the needs of The Times, the use of intelligent modern information technology to realize the deep excavation of rural tourism resources and experience, promote the integration of "rural tourism + 5G" development, rich rural tourism service content, integrate resources, development of leisure, vacation, sightseeing, shopping in the integration of the new socialist countryside, promote rural tourism to wisdom transformation, meet the demand of the new wisdom rural tourism, wisdom country will lead the regional economy to become a new type of tourism.

Guangxi rural "text brigade + artificial intelligence" integration development can draw lessons from the successful experience of Qinhuangdao region, seize the wave of the development of new quality productivity, integrate local resources, dig deeper into the cultural connotation, foster new forms of rural tourism, with the help of technology to improve service quality and tourist satisfaction, promote the sustainable development of rural tourism.

5. Analysis of the Integrated Development Status of Rural Cultural Tourism and Artificial Intelligence in Guangxi

5.1. Rural Resource Endowment of Guangxi

Guangxi has great potential for the integrated development of rural culture and tourism, mainly benefiting from its unique natural resources, rich cultural resources and tourism resources.

Guangxi is blessed with unique natural resources, and the subtropical monsoon climate provides a warm and humid climate and rich water resources for the countryside. The vast forest, clear rivers and unique natural landscape provide a good natural foundation for rural tourism, attracting many tourists to come to experience.

The national cultural diversity of Guangxi is its unique cultural resource. As one of the five ethnic minority autonomous regions, Guangxi has many ethnic minorities, whose culture, festival customs and folk handicrafts have added profound cultural deposits to rural tourism. At the same time, the red cultural resources of Guangxi also provide a unique historical and cultural heritage and patriotic educational significance for rural tourism.

Guangxi has rich and diverse tourism resources, including natural landscapes such as Guilin landscape, transnational

waterfalls, beaches and beaches, as well as rural tourism resources such as rural homestay and farmhouses. These resources provide tourists with a unique rural experience and cultural exchange opportunities, making the rural tourism in Guangxi has a unique charm.

Under the background of international cooperation, the integrated development of rural culture and tourism in Guangxi has also ushered in new development opportunities. As an important gateway for the construction of "Belt and Road" and an important region for economic exchanges with ASEAN countries, Guangxi can strengthen cooperation and exchanges with the international tourism market, introduce more international tourists and investment, and promote the international development of rural cultural tourism industry.

It has great potential for the integrated development of rural culture and tourism in Guangxi. In order to give full play to these advantages, it is necessary to strengthen planning guidance and policy support to promote the innovative development and service upgrading of rural cultural tourism industry. At the same time, strengthen international cooperation and exchanges, enhance the international competitiveness of Guangxi rural cultural tourism industry.

5.2. Development Status of Rural Cultural Tourism in Guangxi:

In recent years, Guangxi has seized the historic opportunity of the rural revitalization strategy and carefully formulated and implemented a series of targeted policies and measures. Under the strong impetus of the policy, the scale of the rural tourism industry continues to expand, and a number of major rural tourism projects have sprung up like bamboo shoots after a spring rain, injecting strong impetus into the rural revitalization.

At the same time, the rural tourism in Guangxi is also facing many challenges. Imperfect infrastructure has become a key factor restricting its further development. Problems such as inconvenient transportation and poor accommodation conditions have greatly reduced tourists' travel and experience. In addition, the serious problem of product homogenization, the lack of innovation and characteristics, make it difficult for rural tourism to stand out in the fierce market competition.

Low level of service is also a big pain point. Some rural tourism practitioners lack professional training and have uneven service quality, unable to meet the growing personalized needs of tourists. Moreover, the brand effect is not prominent, and the brand construction of rural tourism in Guangxi is relatively lagging behind, lacking popularity and influence, and it is difficult to attract more tourists to experience.

In the face of the above situation, Guangxi rural tourism industry must make concerted efforts, increase investment, improve quality, and strengthen brand construction. Only in this way, can we cope with the increasingly fierce market competition, realize the sustainable development of rural tourism, and make greater contribution to rural revitalization.

5.3. Application Status of Artificial Intelligence in Rural Guangxi:

Rural Guangxi have applied artificial intelligence technologies in smart agriculture, rural e-commerce and logistics, and rural education. Smart agriculture, with machine vision and smart sensors, improves production efficiency, while rural e-commerce opens up Internet sales

channels for farmers, and also improves efficiency through optimized urban and rural logistics. In addition, AI technology also helps integrate educational resources and bring high-quality online education to rural children.

Although the application of artificial intelligence technology in rural areas of Guangxi has achieved initial results, it is still in its infancy overall. The penetration rate of intelligent agricultural equipment and technology needs to be further improved, and there is a certain gap between the development of rural e-commerce and intelligent logistics and the developed eastern regions. This reflects a shortage of technology, talent, inadequate infrastructure, and limited capital and resources.

Rural areas in Guangxi still face many challenges in the application of artificial intelligence technology, such as the rapid update of technology, a large amount of capital investment needs, and the acceptance of farmers. But at the same time, there are also policy support, market demand growth and other huge development opportunities. It can be said that although the road is full of challenges, Guangxi countryside is breeding the huge potential for the application of universal artificial intelligence technology. As long as it can overcome the challenges and seize the opportunities, it is expected to realize agricultural modernization and promote rural revitalization.

5.4. Integrated Development Status of Rural Cultural Tourism and Artificial Intelligence in Guangxi:

In Guangxi, the integrated development of rural cultural tourism and artificial intelligence has made positive progress in recent years. However, there are also many challenges and problems in this process. In the field of cultural tourism, Guangxi has actively promoted the development of rural tourism with its rich natural resources and profound cultural deposits. A number of rural tourism projects have emerged as The Times require, effectively promoting rural revitalization. However, with the deepening of the development of various cultural and tourism projects, some problems have gradually become prominent. Imperfect infrastructure has become a key factor restricting the further development of rural tourism, and the inconvenience of transportation and accommodation conditions has caused a great impact on the travel experience of tourists. At the same time, the homogenization of rural tourism products is becoming increasingly serious, and the lack of innovation and characteristics, which makes the rural tourism in Guangxi at a disadvantage in the market competition.

In terms of artificial intelligence application, rural areas in Guangxi have achieved initial application results in smart agriculture, e-commerce logistics, online education and other fields, but the whole is still in its infancy. Smart agriculture improves agricultural production efficiency by introducing machine vision, intelligent sensors and other technologies; rural e-commerce opens up new channels for the sales of agricultural products. However, the penetration rate and application depth of artificial intelligence technology still need to be improved, and the gap with the developed regions in eastern China is obvious. This is mainly subject to factors such as technology, talent shortage and imperfect infrastructure.

More importantly, how to effectively integrate the two fields of cultural tourism and artificial intelligence to realize complementary advantages and coordinated development is

an important topic facing the rural areas in Guangxi. At present, the integration development of the two fields is still in the initial stage, lack of deep integration and innovation. The cultural tourism industry has failed to make full use of artificial intelligence technology to improve service quality and tourist experience, and the application of artificial intelligence technology in the field of cultural tourism is relatively simple and simple.

Although the integrated development of rural cultural tourism and artificial intelligence in Guangxi has broad prospects, challenges and problems coexist. In order to realize the deep integration and sustainable development of this field, rural areas in Guangxi need to increase investment, introduce and train professional talents, improve infrastructure, and actively explore new integration models. Through continuous innovation and efforts, we will give full play to the respective advantages of cultural tourism and artificial intelligence to promote the all-round revitalization and development of rural areas in Guangxi.

6. Path and Countermeasures of "Cultural Tourism + Artificial Intelligence" to Improve Rural Revitalization in Guangxi

The implementation of the rural revitalization strategy in Guangxi has provided a broad space for the integrated development of "cultural tourism + artificial intelligence". With artificial intelligence technology as the engine, this model promotes the deep integration of culture and tourism, helps the comprehensive development of agriculture, culture, tourism and rural governance in Guangxi, and provides strong support for the realization of comprehensive rural revitalization.

6.1. Construction of the Integration Mode of "Cultural Tourism + Artificial Intelligence"

The integration mode of "cultural tourism + artificial intelligence" has shown great potential and value in the rural revitalization in Guangxi. The application of this model will promote the rural development in Guangxi into a new stage, which is embodied in the following aspects (Table 2):

Table 2. Application and practice of Artificial Intelligence in rural Revitalization

order number	name	concrete content
1	agricultural modernization	The intelligent agricultural system uses big data and Internet of Things technology to realize real-time monitoring and accurate management of the farmland environment, provide scientific and personalized planting suggestions for farmers, and improve the yield and quality of agricultural products. The application of e-commerce platforms and intelligent logistics system enables agricultural products to enter the market more efficiently and directly increase farmers' income
2	Inheritance of traditional culture	Artificial intelligence technology provides a new way for the digital protection and display of the rich ethnic cultural resources in Guangxi. Through virtual reality (VR) and augmented reality (AR) technology, visitors can personally feel the charm of history and culture personally. Big data analysis technology helps developers know the needs of tourists, 3 and promote the innovation and promotion of cultural and creative products.
3	Upgrading of tourism industry	The smart tourism platform provides personalized and convenient services for tourists. The intelligent recommendation system and tour guide system bring better travel experience to tourists, while big data analysis helps to optimize the allocation of tourism resources and improve the service quality.
4	Rural governance innovation	Artificial intelligence technology has improved the intelligent level of rural governance. The intelligent monitoring system monitors the rural security situation in real time, and big data provides scientific basis for government decision-making, while the intelligent public service platform provides more convenient and efficient services for rural residents.

6.2. "Cultural and Tourism + Artificial Intelligence" to Improve Rural Economic Development

To build the interaction and integration of smart industries and the cloud data platform of smart rural tourism is the key to promote the intelligent cultural development of rural tourism in Guangxi, help the sales of rural characteristic agricultural and sideline products, and develop the tourism sharing mode with the mutual integration of the three industries. Artificial intelligence technology has effectively promoted the momentum of the rural economy, and its specific functions are shown below (Table 3).

6.3. "Cultural and Tourism + Artificial Intelligence" to Improve the Development of Rural Culture

Guangxi's unique natural scenery and profound cultural

heritage provide unique conditions for building a strong rural tourism brand.

1) Create diversified theme tourism products: Centering on the core brand element of "Guilin landscape", carefully plan and create a series of diversified theme tourism products, covering traditional landscape sightseeing, longevity and health, border exploration, coastal vacation and other diversified experiences.

2) Development of characteristic tourism products: Combining the rich ethnic culture and historical background of Guangxi, develop tourism products such as ethnic customs, historical and cultural experience, red research and so on, to meet the needs of different tourist groups.

3) Improve the level of tourism service: committed to improve the level of tourism service, to ensure that tourists enjoy high-quality services in the process of travel.

4) Strengthen the protection and inheritance of rural culture: use artificial intelligence technology to carry out digital protection and restoration of rural cultural heritage, and

deeply excavate and organize, extract the core values and spiritual connotation of rural culture, and provide strong

support for the inheritance and development of rural culture.

Table 3. The role of Artificial intelligence in rural economic development

order number	name	content
1	The construction of the smart rural tourism cloud data platform	By collecting and analyzing the behavior data of tourists through the mobile platform, we can deeply understand the preferences' preferences and expectations, accurately grasp the market demand, and provide strong support for the sustainable development of rural tourism.
2	Agricultural products, precision marketing	The smart tourism platform can realize the accurate push of tourism information, enable enterprises to carry out precise marketing according to the preferences of tourists, improve the marketing efficiency, and improve tourists' satisfaction and loyalty.
3	We will promote sales of rural characteristic agricultural and sideline products	Combining agricultural products with tourism culture and developing cultural and creative products with local characteristics can not only meet the shopping needs of tourists, but also create more employment opportunities and economic income for local farmers.
4	Improve the methods of rural tourism	Using advanced technologies such as 5G Internet of Things, design and develop new cultural and creative products integrated with traditional tourism products to enhance the image of smart rural tourism attractions. At the same time, we will actively promote the coordinated development of tourism and the 5G Internet of Things to inject new vitality into the future development of rural tourism.

6.4. "Cultural and Tourism + Artificial Intelligence". Improve the Level of Rural Governance

Perfect infrastructure plays a decisive role in supporting the

development of rural tourism. When promoting the high-quality development of rural tourism, Guangxi needs to strengthen the infrastructure construction, focusing on the following aspects (Table 4)

Table 4. Important measures to improve the development of rural cultural and tourism industry

order number	respect	concrete measure
1	Improve traffic conditions	Accelerate the transformation and upgrading of rural tourism roads, promote the construction of "four good rural roads", and build a "fast forward and slow travel" transportation system for rural tourism.
2	We will strengthen supporting construction	Further improve the health level of rural tourism areas, provide tourists with high-quality accommodation options, optimize the network information service and online booking of rural tourism attractions and surrounding scenic spots, Wi-Fi, intelligent interpretation, scenic spot information push, ecological environment monitoring and other functions, to help the smart rural tourism one-stop service.
3	We will strengthen the construction and cultivation of demonstration sites	Counties (cities, districts) annual farmhouse (homestay) demonstration sites guide local farmers to improve their service quality and management level, pay attention to the exploration of characteristics and cultural connotation, reflect the unique charm of local rural culture, and provide tourists with rich and colorful rural tourism experience.

"Cultural and tourism + artificial intelligence" to improve the training of rural talents

Rural talents play a vital role in rural revitalization, especially under the integration mode of "cultural tourism + artificial intelligence", the cultivation of rural talents in Guangxi is particularly important. Guangxi should formulate a series of comprehensive and systematic talent training plans to improve the comprehensive quality and professional skills of rural talents. On the one hand, attention should be paid to the cultivation of non-genetic inheritors and cultural talents in rural areas. By offering special training courses and combining with the traditional mentoring and apprentice inheritance mode, we should help them master more intangible cultural heritage skills and cultural knowledge, and improve their cultural literacy and inheritance ability. On the other hand, we should strengthen the training of rural tourism practitioners, carry out comprehensive training activities, including tourism knowledge lectures, service skills training, safety awareness education, etc., to help them improve their professional quality and service awareness, and provide tourists with better tourism experience. In order to realize

these training plan, need to establish training base, through cooperation with institutions of higher learning, tourism enterprises, in the key rural tourism scenic spot set up special training base, provide perfect training facilities and resources, open professional courses related to rural tourism, for rural tourism practitioners to provide a system of learning and growth platform. At the same time, the implementation of the talent introduction plan to attract outstanding rural tourism professionals from inside and outside the region to Guangxi by providing competitive salary and treatment, good working environment and broad space for career development.

7. Conclusion and Suggestions

This study focuses on the emerging integration mode of "cultural tourism + artificial intelligence". With the background of rural revitalization in Guangxi, it deeply discusses the application potential of artificial intelligence technology in rural tourism, and puts forward the innovative ideas of the intelligent transformation and upgrading of rural tourism enabled by science and technology. Research shows that the introduction of artificial intelligence technology can

effectively improve the intelligent level of rural tourism in Guangxi, promote industrial upgrading, so as to promote rural revitalization. The conclusions of the study are reflected in the following five aspects:

1) Innovative tourism experience: Use VR technology to explore village culture, develop VR tourism products, realize online and offline interactive experience, and improve tourists' satisfaction.

2) Innovative tourism service: establish a cloud service system, realize tourism resource sharing and intelligent management, provide digital and personalized services, and meet the quality and diversified needs.

3) Innovative tourism content: use virtual technology to visualize cultural content, innovate tourism methods and content, create a virtual rural paradise, realize education through entertainment, and promote the development of cultural tourism industry.

4) Cultivate new forms of rural tourism: promote the intelligent rural complex model, integrate high-tech agriculture, leisure and vacation, and rural communities, build an intelligent rural tourism industry chain, and promote the integration of tourism and the three industries.

5) Help rural tourism: optimize the network information service and online booking service of rural tourism scenic spots and surrounding scenic spots, build a smart rural tourism cloud data platform, realize precision marketing and service, improve service quality and tourist satisfaction.

7.1. Research Discussion

The fusion mode of "cultural tourism + artificial intelligence" proposed in this study has the following positive significance:

Promoting cultural inheritance and development: Using artificial intelligence technology to visualize traditional cultural content, make it easier to understand and spread, enhance the sense of cultural experience, and promote cultural inheritance and development.

Promoting industrial transformation and upgrading: enabling rural tourism through artificial intelligence technology, realizing intelligent management, service and marketing of tourism resources, improving industrial efficiency and competitiveness, and promoting industrial transformation and upgrading.

Improving the quality of rural life: To improve rural public services, improve infrastructure construction, optimize rural governance, improve rural living environment, and improve the quality of life of rural residents.

Help rural revitalization: Integrate culture, tourism, science and technology and other factors to promote rural economic development, shorten the gap between urban and rural areas, and realize rural revitalization.

7.2. Shortage of Research

This study still has the following shortcomings, which need further research: First, the lack of specific case analysis: the lack of in-depth analysis of specific cases in the study, the lack of discussion of practical application scenarios and technical details, it is difficult to reflect the practical feasibility and effect of the integration mode of "cultural tourism + artificial intelligence". Second, there is a lack of economic benefit analysis: the research does not analyze the economic benefits of the integration mode of "cultural tourism + artificial intelligence", and lacks the evaluation of cost, income and return on investment, so it is difficult to

support its economic feasibility. Third, the lack of research on social influence: the research on the possible social impact of AI technology application in rural tourism, the lack of discussion on employment, privacy protection, ethics and other aspects, it is difficult to comprehensively evaluate its social benefits.

7.3. Future Research Direction

Future research needs further insight into the following aspects:

1) Carry out case study: select typical cases for in-depth study, analyze the specific application scenarios, technical solutions and implementation paths of the integration mode of "cultural tourism + artificial intelligence", and evaluate its economic and social benefits.

2) Detailed technical plan: deeply study the specific application scenarios of artificial intelligence technology in rural tourism, formulate a feasible technical plan with perfect technical details, and explore its technical feasibility and implementation path.

3) Economic benefit analysis: conduct economic benefit analysis of the integration mode of "cultural tourism + artificial intelligence", evaluate its cost, income and return on investment, and provide reference for decision-making.

4) Explore the social impact: pay attention to the possible social impact of the application of artificial intelligence technology in rural tourism, study the potential problems in employment, privacy protection, ethics and other aspects, and put forward corresponding solutions and countermeasures.

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