

Discuss on the Construction of Digital Rural Revitalization Information Service Platform in the New Era

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Abstract: If we want to assume digital rural areas, the focus must be on industrial prosperity, adhere to quality first, green agriculture, and take the structural reform of the agricultural supply side as a guide to further promote the construction speed of modern agricultural industrial system, management system, and production system, thereby improving agricultural productivity, competitiveness, and innovation, and promoting the realization of an agricultural power. In the new era, the system engineering of digital rural projects is relatively complex. It is necessary to adopt advanced system engineering ideas and methods, arrange top-level design, institutional setting, innovative technology, talent cultivation, and optimize operation modes, in order to achieve an information service platform and achieve digital rural revitalization.

Keywords: New Era; Digitization; rural revitalization Information service platform; Construction planning.

1. Introduction

In the new era, the use of Internet of Things technology to build a modern new countryside mainly relies on the most advanced Internet of Things technology. Facing the general underdevelopment of rural areas in China, intelligence, technology, and modernization are the goals of rural life construction, in order to improve the quality of farmers' lives and build a digital life value system. Nowadays, China's development strategy is more inclined towards rural construction, and achieving a new socialist countryside is the best proof. The strong support of the country and the active cooperation of the government are both driving forces for promoting the construction of digital rural areas and the key to building an information service platform. And in the 12th Five Year Plan for the Development of the Internet of Things, it is also proposed to focus on promoting the development of livelihood industries, fundamentally solving the actual problems of people's lives. In addition, the premise of building a digital countryside is to gradually improve the standards, technology, and development level of the Internet of Things, in order to ensure the intelligence of information service platforms.

2. Research Background

In terms of technology, the information service platforms currently built use technologies that are relatively mature in China, and team members have high requirements for comprehensive quality, software development technology level, and computer technology skills. This provides a basic guarantee for software development, mini program development, website operation and maintenance, and webpage production.

In terms of products, the construction of characteristic rural areas must deeply explore, promote and promote rich investment projects, agricultural and sideline products, distinctive cultural and tourism resources. Moreover, the current information service platform is difficult to create its

own unique brand image for rural areas. Therefore, it is necessary to establish a more intelligent rural revitalization exhibition service platform, integrate artificial intelligence thinking and digital rural construction ideas, and integrate the advantages of the Internet. To better serve the construction and development of new rural areas, promote the development of beautiful rural areas towards cities, achieve rural revitalization, and strengthen agriculture, optimize rural areas, and increase farmers' income[1].

In terms of services, we will attract and cultivate more talents to invest in the construction of the digital rural revitalization information service platform, fully unleashing our personal passion and understanding of the industry, and ensuring that the platform construction has more brand planning, theoretical foundation, and practical experience; Talent can be attracted through investment methods, combined with exhibition activities in a mixed online and offline mode to enhance the company's visibility, in order to attract professional audiences or consumers. In the later stage, practical research activities in rural areas can also be carried out to understand the rural situation on site and establish cooperative relationships. It is also possible to use big data technology to irregularly operate and maintain relevant customers, and further enhance the reputation and visibility of the digital rural revitalization information service platform through regular online exhibition activities or well-known exhibitions in China.

In theory, digital countryside refers to the application of digitization, informatization, and networking in the process of digital rural economic and social development, while strengthening farmers' modern information technology capabilities, in order to accelerate the development and upgrading of digital countryside. This is to optimize the content of digital rural construction along the strategic direction of digital rural construction. Digital countryside is the application of digitization in the development of digital rural economy and society, which means adhering to the construction of digital countryside, which is the main content of building a digital China; In addition, building a digital

countryside can continuously improve the level of rural construction and governance. Rural governance is also the foundation of national governance and a key part of comprehensive and source governance. By skillfully using IoT thinking and technology, rural governance can become more standardized, diversified, and technological, thereby continuously optimizing the rural governance system.

3. Basic Features of Information Service Platform

3.1. Novelty

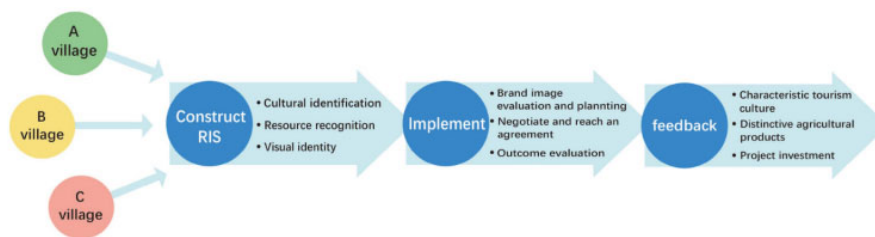
(1) The digital rural revitalization information service platform will actively respond to the national rural revitalization strategy, organically integrate digital rural construction, rural revitalization, the Internet, and exhibition, in order to build a novel service platform with innovative subjects.

(2) The platform mainly serves groups such as rural tourism, agricultural products, grassroots people, investment partners, and rural grassroots organizations, providing high-quality tourism resources and agricultural products services to vigorously promote local culture and attract more investment projects. Utilize online exhibition activities to gather more effective development resources, further promote marketing in the agricultural product industry, and allow local projects to receive more investment [2].

(3) The established information service platform places greater emphasis on mutual benefit and win-win results, hoping to enhance investment returns while driving rural economic development, and comprehensively integrate rural revitalization and online exhibitions.

3.2. Progressiveness

The construction of the digital rural revitalization information service platform mainly combines the



Rural Identity System

Figure 1. Rural Image Recognition System

4.2. Production countermeasures

Take website construction as the guiding point, and build small programs, mobile phone software, WeChat official account, etc. In the initial stage of construction, the main focus was on conducting practical research on a certain village, creating customized chain services based on the basic characteristics and actual situation of the village, further strengthening the service level, and deeply optimizing the rural image theory recognition system independently developed by the team.

In the mid-term of construction, practical experience and social responses generated during the construction process can be continuously promoted to surrounding rural organizations. At the same time, reasonable fees can be

development strategy and actual situation of rural areas in China. It has built an online platform to promote the interaction between rural areas and investors, breaking the barriers to rural development, and thus building a new digital rural revitalization development model, innovating traditional investment models, and building a stable information service platform. It allows for the establishment of a complete docking service mechanism between rural resources and capital markets, thereby promoting rural customs Sustainable development of cultural and tourism resources, and comprehensive rural revitalization.

3.3. Uniqueness

The digital rural revitalization information service platform has a certain uniqueness, which means building a national digital rural revitalization network exhibition platform, integrating online and offline activities to improve the rural revitalization network, further promoting project financing for rural grassroots organizations, promoting the inheritance and development of agricultural industry and culture, establishing a sense of rural cooperation, increasing rural publicity efforts, and utilizing advanced internet technology to promote rural resources, Present rural culture and characteristics, thereby restructuring rural awareness[3].

4. Platform Construction Strategy

4.1. Developing new products

The digital rural revitalization information service platform built mainly includes official microblog, applet, mobile software, website and WeChat official account, etc. It makes full use of the advantages of various technical means to create a new ecological rural revitalization information service platform, create a unique rural image at multiple levels and in all directions, so as to create customized chain services. See Figure 1 for details.

charged to meet operational needs, ensuring that more rural areas can cooperate with it, and thus ensuring the operation of digital information service platforms. Integrate various local policies, investment projects, cultural characteristics, tourism resources, agricultural and sideline products, etc., and form an interactive exchange system that integrates the theme of rural characteristics in all aspects, to deepen cooperation between rural and urban areas[4].

Through cooperation between rural areas, we aim to build a caring farm, promote communication in rural construction, and promote the exchange and exchange of characteristic agricultural products among different villages, thereby uniting different rural resources, expanding rural strength, expanding construction scale, and achieving rural revitalization.

Through communication and cooperation between rural and urban areas, we aim to optimize the design of agricultural and sideline product packaging in a planned and targeted manner based on the actual situation in rural areas, integrate rural characteristic culture, and promote it to cities, enhance market value, and enrich people's lives. We can also provide professional leisure tourism services for tourists through information service platforms, promote various farmhouse pleasures, and allow them to enjoy life and experience slow life.

Increase the cooperative relationship between rural areas and enterprises, utilize the advantages of digital information service platforms, promote various rural incentive tourism, provide advanced information services, connect well with characteristic rural exhibition activities, and enable rural development to receive more high-quality enterprise investment. Not only should we create a native and distinctive rural life, but also increase farmers' income through service platforms.

At the same time, it is also possible to form cooperative relationships with various media, optimize resources and platform promotion channels, expand mature promotion ecological chains, and build a unique rural culture service system, in order to attract other rural areas to join the information service platform and promote the sustainable development of the platform.

4.3. Key Technologies

The key technology of the established digital rural revitalization information service platform is to create customized chain services based on rural characteristics, combine various unique rural content and resources, optimize the design and platform to showcase to various groups, integrate the Internet and rural products, and ultimately achieve high-quality promotion projects, in order to promote the sustainable development of rural characteristic culture and tourism resources. Another key point of the information service platform is Internet plus agricultural products - sale; In general, agricultural products have obvious timeliness and regional characteristics. In the previous development model, farmers would wait for merchants to receive goods after planting and harvesting. However, this sales direction not only affects the sales time of agricultural products, but also affects the sales prices of farmers. By utilizing the digital rural revitalization information service platform, farmers can independently choose to acquire merchants on the platform, preventing information blockage and reducing income. On web pages, HTML can be used to narrate various texts, CSS can be used to design and layout corresponding styles, and JavaScript can be used to design unique web page effects to attract consumers. Various advanced technologies can be integrated to beautify web page content, improve web page attractiveness, and in the later stage, jq technology can be used to supplement, enriching user experience and strengthening industry core competitiveness. One of the key technologies is the love farm built with big data and sensors. Based on the farm's crop planting situation and the current situation of each household's poultry and livestock breeding, targeted environmental, pest, and soil parameters are provided, and with technical support, early warning, data collection, transmission, and processing are achieved.

4.4. Technical support

The Internet of Things technology can establish a more

complete supply chain information system for agricultural product systems, such as production information, processing problems, transportation conditions, sales results, etc. This technology can track and monitor agricultural products in real-time, enabling information exchange and integration of agricultural products in the supply chain system, thereby ensuring the safety and quality of products.

Radio frequency identification technology can automate identification and non-contact tracking of the entire production, processing, and transportation process of agricultural products. By integrating this technology with the Internet of Things technology, real-time monitoring of product conditions can be achieved[5].

Through cloud computing technology, a large amount of data information can be centrally processed, such as product production, transportation, sales, etc. This technology can provide high-quality data storage and processing capabilities, providing precise data protection for agricultural products.

The application of artificial intelligence technology can achieve intelligent and automated tracking and monitoring of agricultural products, such as using machine learning algorithms to effectively classify and predict the quality of agricultural products, and using data mining technology to comprehensively detect various abnormal situations in the agricultural supply chain.

The agricultural product tracking system in the digital rural revitalization information service platform needs to continuously collect and process various data information. Effective use of big data analysis technology can make the platform's data analysis and processing capabilities more obvious. By using big data analysis technology, it can comprehensively grasp the actual supply chain of agricultural products, timely identify and handle problems, ensure the authenticity of information data, and ensure the effectiveness of platform applications.

5. Conclusion

Under the development of the new era, we have ushered in the era of Internet plus concept. The demand for industrial upgrading, public management and actual requirements are more mature. In order to further promote the construction of rural informatization, comprehensively deepen the work of information poverty alleviation, and create a new digital new rural engineering system, we plan to build a standard, intelligent, and unified digital information service platform, mainly providing information services for rural construction and development, Let the work of rural governments proceed in an orderly manner, accelerate the exchange of rural resources, increase farmers' income, comprehensively promote and promote rural culture, drive rural revitalization, and narrow the urban-rural gap.

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References

- [1] Bai Jing. On Building a New Era Agricultural Modernization Service System to Assist Rural Revitalization [J]. Economic and Social Development Studies .2021(11):197-198.
- [2] Zhang Xiaodan. Research on the Construction and Service Design of Red Resource Digital Platform under the

- Background of Rural Revitalization Strategy - Taking Wenzhou, Zhejiang as an Example [J]. Folklore, 2022 (8): 0042-0044,48.
- [3] Wang Rongxia, Li Jindian. Research on the construction of "Internet plus" modern agricultural information service platform under the background of rural revitalization [J]. Information Weekly, 2019 (19): 0495.
- [4] Cheng Yonghui, Yang Haijuan, Li Jianwei, et al. Research on Rural Spatial Planning and Construction Management Information Platform under Rural Revitalization Strategy: Taking Chakou Village, Fuping County as an Example [C]//2018 China Urban Planning Annual Conference. 2018:1-12.
- [5] Chen Yufeng, Yu Bin, Wang Mingxing. Discussion on the Construction and Application of IP Emergency Broadcasting in the New Era [J]. Cable Television Technology, 2018(9): 99-100.