Exploration of Digital Countryside in the Context of Rural Revitalization Based on the Financial Industry and E-Commerce

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Keywords: Rural revitalization, digital agricultural reform, e-commerce, finance

Abstract: Rural revitalization has become a hot topic in the academic community, to achieve this goal, a policy-oriented approach is needed to deconstruct the rural economy and industries in the current context of the digital agricultural reform, e-commerce and finance. To assess the feasibility of rural revitalization, a combination of offline field visits, online surveys, and data analysis using DL economic models were employed. However, the sample size of online surveys was limited due to the low availability of electronic devices in rural areas, which may have affected the accuracy and generalizability of the results. One of the proposed solutions for the rural revitalization is the digitization of agriculture, which can help farmers to access information and market their products more efficiently. The integration of e-commerce and finance can also provide better financing and credit support for rural enterprises, which can further drive economic development in rural areas. The development of supply chain finance for agricultural products can also help to address the issue of financial difficulties in agriculture, rural areas, and farmers. Overall, the digitization of agriculture, e-commerce, and finance are important drivers for the rural revitalization strategy in China. However, it is crucial to consider the local context and tailor the solutions to fit the specific needs of different rural areas.

1. Introduction

In 2020, the COVID-19 pandemic had a serious impact on the global economy, but the digital economy still maintained steady development against the trend. The development of the digital economy has become an important force for promoting economic stability and recovery. In this regard, China has made significant progress in promoting digital rural development, becoming the world's second-largest digital economy. The government has introduced a series of policies to accelerate the process of digital rural development and promote the digital transformation of agriculture and rural areas.

In 2021, the "Digital Rural Development Guideline 1.0" proposed the overall framework design and typical application scenarios for digital rural development, providing important references for exploring digital rural development models tailored to local conditions. Digital technologies and platforms have been embedded in many areas of rural infrastructure, economy, governance, and life, and the digital transformation of traditional rural infrastructure is accelerating.

Implementing the rural revitalization strategy launched by China is a major historical task in achieving the goal of completing the building of a moderately prosperous society in all respects and building a modern socialist country. This is also the key to the work of agriculture, rural areas and farmers in the new era.

Over the past five years, China's agricultural and rural development has made historic achievements, providing important support for the overall development of the country. The government has continuously increased support for agriculture, rural areas, and farmers, promoted agricultural modernization and new rural construction, deepened rural reforms, and improved the living standards of rural residents. This has resulted in significant increases in agricultural production capacity, improvements in rural ecology, and a reduction in poverty.

Under the appeal of the country, the resources of the whole society should be fully mobilized. Government management departments should pay attention to the actual situation of agriculture and rural areas, seize opportunities, take effective measures, improve agricultural level, promote rural progress, and develop farmers' levels. From the perspective of e -commerce and finance, strengthen the digital construction of rural areas, and accelerate the integration of urban and rural development.

2. Policy sorting

Policy Outline: Rural Revitalization

Rural revitalization should be approached through coordination across five areas, with a focus on industry and the other four areas including rural governance, talent introduction, land reform, and village living environment.

Through continuous learning and improvement, rural e-commerce will reduce the transaction cost of agricultural products and achieve increasing returns on the scale of agriculture and agricultural products with the empowerment of technology. Rural e-commerce, empowered by digital technology, has the role of interconnection, which is conducive to information sharing, reducing market search costs and transaction costs, and improving quality and efficiency for rural revitalization. At the same time, the rural e-commerce transaction mode breaks through geographical restrictions, reduces the problem of market information asymmetry, and is conducive to increasing rural residents' income. In recent years, the country has continued to increase its policy support, which has resulted in the rapid development of rural EC in China. According to the report from the Ministry of Commerce in China, online retail sales in rural areas reached 1.37 trillion RMB in 2018, constituting 15.2% of all online retail sales. As compared to 2017, rural online retail sales growth rate increased by 30.4%, whereas the national online retail sales growth rate was only 23.9%. Agricultural online retail sales reached 230.5 billion RMB, representing approximately 17% of online retail sales in rural areas. By 2018, there were 220 million internet users in rural areas in China, and the internet usage rate in rural areas was 38.4% ^[1].

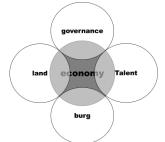


Figure 1: Rural industrial structure chart

As shown in Figure 1. To expand the economic system, policy support must be provided for agriculture and to encourage rural entrepreneurship. The development of rural e-commerce has driven the development of the rural economy and contributed to the construction and improvement of the entrepreneurial environment, attracting more young people to start businesses and work in rural areas, stimulating rural vitality and promoting harmonious rural development.

2.1 Start from the production layout to understand the background of rural revitalization

2.1.1 Development of regional characteristic industries from policy to implementation

Each rural area should prioritize the development of agriculture and rural areas, and comprehensively promote rural revitalization. Fully implement the rural revitalization strategy, strengthen the use of work to supplement agriculture, and use cities to lead townships, promote the formation of a new type of worker-farmer-urban relationship in which workers and peasants promote each other, urban and rural complementarity, coordinated development, and common prosperity, and accelerate agricultural and rural modernization. Develop the county economy, promote the integrated development of primary, secondary and tertiary industries in rural areas, enrich the rural economic format, and expand the space for farmers to increase their income. From the "2021 Rural E-commerce Development Trend Report", we learned that the e-commerce platform represented by Pinduoduo will continue to deepen the rural market, help agricultural products rise, support local governments to build unique agricultural industry belts based on source advantages, and establish and improve farmers' sharing. The value-added income mechanism of the industrial chain, the formation of competitive industrial clusters, and the promotion of the integrated development of primary, secondary and tertiary industries in rural areas will become one of the new driving forces for the high-quality development of the regional economy.

2.1.2 A case study of Pinduoduo passion fruit agricultural products in Guangxi

In recent years, the accelerated penetration of new e-commerce platforms represented by Pinduoduo in agricultural and rural areas has gradually improved the problems of insufficient product visibility, narrow sales radius, and high cost in product circulation in the past, and promoted the emergence of new integration in the agricultural product industry belt. "The Rural E-commerce Development Trend Report 2021" pointed out that the upward ultra-short supply chain of agricultural products represented by Pinduoduo has promoted the upgrading of the circulation structure of the regional characteristic industrial belt, the rapid improvement of the level of e-commerce, and also spawned a new type of characteristic agricultural product industry belt.

Case study: Take the successful deployment of Guangxi passion fruit agricultural product line as an example: Among them, Guangxi passion fruit is a typical agricultural product industry belt driven by e-commerce. According to Pinduoduo's annual report, more than 80% of the products in the platform's best-selling passion fruit list are shipped from Guangxi, and Yulin's shipments account for 50%. Among the "champion agricultural products" with sales of more than 100,000+ on the best-selling passion fruit list, Yulin accounts for more than 40%. Nearly 67% of the main passion fruit growing areas in Guangxi are dominated by e-commerce sales. There are more than 300 passion fruit e-commerce companies in the region, and a mature standardized supply chain system has been formed around the upward trend. Thanks to the rise of fresh consumption in e-commerce, the consumption attributes of passion fruit have also been upgraded from raw materials to ready-to-eat products, and the price has risen all the way to about 7 yuan/kg.

2.1.3 Improving the agricultural integration model

In this Internet+ era, farmers use modern science and technology and modern enterprise methods to combine agriculture with agriculture-related industries, commerce, transportation, credit and other sectors to form a community of interests and realize "integrated agriculture." The realization of "integrated agriculture" can bring together agriculture and other related departments, promote agricultural construction through the provision of funds and technical guidance by other departments and institutions, realize support and feedback for agriculture, and more effectively promote the development of agriculture.

3. Industrial Planning Issues

3.1 Analysis of the development of rural e-commerce industry

3.1.1 Analysis of the Problem of Propaganda System Planning Based on Ideological Concepts

Traditional thinking concepts cannot be changed. At present, the main productive forces in rural areas of China are mainly middle-aged and elderly people. Their education level is not high, and it is difficult for them to accept innovations in their accustomed lifestyle and production ^[2]. Conversely, younger people have higher mental fluidity and their lives are not inclined to be stable, making them more receptive to emerging thought products compared to the elderly population. This is an inherent problem in the social system and also a difficult issue that the rural e-commerce industry faces in this relatively new proposition. At the marketing activity level, if the promotion of new things is not thorough enough, it may not receive widespread recognition and acceptance. Other similar products are likely to take up market share, which may lead to a decrease in the new product's competitiveness in the market, thereby affecting the industry's long-term development. As the internet penetration rate in rural areas is relatively low and rural governments lack some propaganda, some farmers are unable to feel the convenience brought by the internet, which creates some skepticism towards the argument that e-commerce in the countryside can drive the economy. Therefore, sufficient promotion of emerging products is crucial to ensuring the sustainable development of rural revitalization.

3.1.2 Lack of E-commerce Talents

E-commerce is one of the most prominent industries today and has been widely discussed and studied in related majors in universities. However, given the poor employment environment in rural areas, many students are unwilling to start from the grassroots. At the same time, with the popularization and development of the internet, young people in rural areas learn about the more exciting and broader world outside through the internet, so they are full of yearning for life in big cities and are unwilling to stay in rural areas. This has also led to a lack of professional e-commerce talent in rural areas, as there is a lack of professional e-commerce training and the level of information technology is relatively low, which severely hinders the development of rural e-commerce.

3.1.3 Lack of Logistics

Currently, in some rural areas, there are still phenomena such as high transportation prices, untimely delivery, and high damage rates. In the development of rural e-commerce, most of it involves physical agricultural products, and logistics is an indispensable link. Compared with the rapid development of e-commerce, most rural areas are sparsely populated, and besides China Post, few courier companies enter these areas. In addition, factors such as no competitive advantages, dispersed involvement in agricultural product production, long production cycles, long chains, and information

asymmetry make it difficult to control the agricultural product supply chain. At the same time, the task of accessibility and connectivity in poor areas is still arduous, with over 400 towns and 39,000 administrative villages that still have unhardened roads. Most of them are in difficult areas with mountains and deep valleys, and the investment and construction difficulties are significant.

3.2 Analysis of Rural Financial Industry Development Issues

China's digital rural construction has presented a good starting situation, but it still faces many problems and challenges, such as insufficient development in various fields, unbalanced regional development, unclear government functions and market roles, difficult promotion of pilot projects, incomplete supporting mechanisms in terms of cost sharing, benefit sharing, incentive constraints, talent cultivation, etc. Therefore, deepening the measurement and progress research of county-level digital rural development is of great significance for clarifying the current trends of county-level digital rural development, identifying development shortcomings and deficiencies, and optimizing the design of support policies.

3.2.1 The most important factor influencing young farmers' entrepreneurial decisions is social financial capital.

(1) The role of young farmers in social capital Young farmers are a new type of agricultural enterprise, mainly engaged in agricultural production, management and service delivery. They represent a new era of networking. As a new type of agricultural enterprise, they have their own characteristics, and the study of their entrepreneurial problems has a certain research value. With the continuous development of new farmers, the Chinese government and academia have begun to study entrepreneurship. In order to solve the deep-seated problems that hinder the entrepreneurial success of new farmers, the theoretical circle urgently needs to carry out in-depth analysis and provide theoretical guidance for their success.

(2) The theory of mutual identification of opportunity cost and social capital Social capital is essentially a specific social network formed by interpersonal interaction and its potential social resources. For entrepreneurs or aspiring entrepreneurs, it is necessary to understand the basic logic of entrepreneurship and accurately determine the timing of entrepreneurship. Seizing entrepreneurial opportunities requires accurate identification of the meaning, origin, valuation, and value of entrepreneurial opportunities in order to achieve competitive business success. When analyzing the factors that affect the identification and development of opportunities, entrepreneurs should consider the natural characteristics of opportunities and the individual characteristics of entrepreneurs. Based on the social capital theory proposed by Nahapiet & Ghoshal (1998), three variables, namely relationship dimension, structure dimension, and cognitive dimension, were introduced and their effects on the feasibility and profitability of business opportunity identification were examined using the SEM model. The results showed that the three dimensions of social capital were positively correlated with feasibility and profitability. Most studies on the effects of social capital on business opportunity identification are based on strong and weak contact theory, and few studies focus on the theoretical mechanism of how social capital affects business opportunity identification, especially those related to new farmers. Exploring the theoretical mechanism of how social capital affects the identification of business opportunities for new farmers can promote the identification of creative opportunities, the exploitation of business opportunities, the integration of resources, and the construction of successful entrepreneurial strategies^[3].

3.2.2 The impact of financial reform on new young farmers in rural areas.

(1) New laws and regulations - the new "Commercial Bank Act" was enacted and restricted the

scope of business. In line with the principle of prudent regulation, the new "Commercial Bank Law" stipulates that regional banks cannot expand their business nationwide, which also means that the development model of regional banks relying on Internet resources will be restricted. For regional banks that lack core competitiveness, have unclear business positioning, high risks and insufficient capital, the new law provides a sound direction for their future development: Return to their origins, focus on local development. For regional banks, rapid and blind expansion on a large scale is not sustainable, and targeting specific and differentiated needs, intensively serving local markets and local economies are new challenges.

(2) The business of large banks has declined, and the path to differentiation has become narrower. Large state-owned banks and stock-owned commercial banks have many advantages, such as capital, technology and talent. Especially after the 2019 Central Economic Conference called for "guiding the demise of the service center of the big banks", the big banks used their advantages such as lower capital costs to dispatch resources nationwide, seize the market, develop an inclusive financial business, and have a greater influence on the business of regional banks. New loans from major banks have also strengthened their support in the areas of small and micro loans and financial services for enterprises.

4. The future trend of the agricultural industry in the digital age

At present, there is a new research on financial support for rural revitalization, and the research focus is mainly related to rural industry, inclusive finance, and financial digital transformation^[4].

4.1 Digital innovation accelerates the development of e-commerce and new retail

Rural e-commerce has become an effective driving force for the development of rural tourism under the background of "Internet +". Through the establishment of rural tourism e-commerce system, offline rural tourism resources can be integrated to boost the online platform publicity and marketing, which is a path choice for the development of rural tourism. However, the development of rural tourism mainly relies on government investment, which is also the important factor of the single mode of rural tourism. The government should attract the investment of external financial institutions, mobilize the initiative of rural areas and the enthusiasm of tourism project construction, improve the market activity of rural tourism economy, and cultivate the necessary conditions for rural independent innovation. Banks are the key point to solve rural financing needs, but the development of rural tourism mainly relies on small and medium-sized enterprises and farmers, and the government has shortcomings in the construction of credit system for small and medium-sized enterprises and farmers. Banks are short of credit talents for rural tourism, and most of the left-behind people in rural areas are elderly and children, making it difficult for financial access to villages. Therefore, to solve the problems of rural tourism development, it is necessary for the government, enterprises, banks, nonbank financial institutions and farmers to combine according to local conditions, restrict all participants with the help of government supervision, legal system and industry rules, innovate and develop personalized rural tourism, avoid the stereotyped and scale effect, and achieve the balance and unity of economic, social and ecological benefits. In the face of the new normal of economic development, combined with the reality of the Puqiao District, the Puqiao District Committee and the District Administrative Committee have successively issued a series of policies and measures to support the development of the e-commerce industry, fully implemented the work of expanding the market, promoting consumption, expanding investment and creating advantages of e-commerce, and vigorously promoted the smooth development of various works of e-commerce, and achieved great results. It is understood that at present, there are 17 e-commerce businesses and two e-commerce enterprises, logistics companies 5, the total amount of e-commerce transactions in 2016 is more than

5 million yuan. The district invested 200,000 yuan in the construction of Puqiao area rural Taobao service.

4.2 Changes in business models

B2C-Alipay and WeChat Pay in China:

Chinese information technology groups Alibaba and Tencent own or operate dozens of competing online businesses, but their mobile wallets stand out for their fundamental impact on everyday life in Chinese cities. Alibaba's dominance in e-commerce, Tencent relies on its mobile social media and information interaction platforms (WeChat and QQ) to connect mass-market audiences with their respective wallet products - Alipay and WeChat Pay. Perhaps most special is the ability of companies to build user trust. Ant Financial, a financial enterprise affiliated with Tencent and Alibaba, is redefining the relationship between users and finance. Finance is becoming simpler; it is significantly more social in nature. This has important implications for promoting financial inclusion in rural China. However, Client Server for the last mile still faces challenges.

From 2011 to 2014, the bank account holding rate of rural residents rose from 53.7% to 74.3%, close to the national average. The government requires state-owned banks to actively open accounts for rural households. This facilitates government-to-individual (G2P) transfer payments for medical and agricultural production subsidies (Shrader and Duflos 2014), and also facilitates the bank card binding model for mobile payments. The wallet sits between the user and his bank account, providing users with a better customer experience. In Chinese for Alipay and WeChat, the label is "third-party payment company", which means that their products depend on related, bank account affirmation of this model, and rising smartphone ownership has also enabled millions of people to use these solutions, but connectivity issues are clearly still a major obstacle to serving more remote areas. The proportion of the rural population who do not use the Internet is 71%, compared with only 33% of the urban population. If the rural population is calculated as half of the total population, the gap in Internet use is even greater. (CNNIC 2017)^[5].

Alibaba e-commerce	Wechat
Alibaba Number of e-commerce shoppers	
(mobile) : 493 million Single-day sales: \$25.3	Average daily users: 902m (2017) Number of
billion (2017) Proportion of mobile sales in a	"official accounts" (i.e., merchants) : 3.5m
single day :90% E-commerce sales in 2016: \$485	(Tencent 2017) Send and receive 46 billion "red
billion Number of village-level service stations:	bags" during the Spring Festival (Tencent 2017)
30,000 (2017)	
Alipay	Wechat Pay
Number of Alipay accounts (desktop and mobile	Total number of wechat and QQ accounts tied to
phone total) : 520 million Alipay merchant	bank cards: at least 600 million. Wechat Pay
handling fee: 0.55%; Number of offline	merchant handling fee: 0.1%-2.0%; P2P transfers
merchants accepting free P2P transfer Alipay: >	are free. Commission for transferring wallet
600,000 (2016) Wallet balance transfer to bank	balance to bank account (cash withdrawal) :
account (cash withdrawal) commission: 0.1%	0.1% Number of offline merchants receiving
Average daily transactions in 2016 (total desktop	wechat Pay : 300,000 (2016) Average monthly
and mobile phone) : 175 million	transaction amount in 2016: \$83.9

Table 1: Alipay and wechat Pay: Based on e-commerce and social platforms

Social media is a good way to promote the acceptance of online finance at the bottom: Payment and WeChat Pay have successfully demonstrated that social media payments in a digital environment can not only address infrastructure and business model deficiencies, but also reduce long-standing barriers to use Psychological and educational barriers to financial services. Delivering electronic red envelopes is the perfect embodiment of this trend. The Chinese custom is to send cash in red envelopes as gifts during the Spring Festival. Now, sending red envelopes digitally in chat groups is both personal and fun. Although only a stylized P2P transfer, its widespread appeal to users in both urban and rural China shows that socializing payments is an integral step in building trust and understanding of digital services in a community setting as shown in Table 1.

As a result, WeChat Pay appears to be easier to grow rapidly in rural areas than Alipay. While many users still support Alipay due to their e-commerce shopping, as reflected in WeChat Pay's growing market share (see Table 1), urban users have found it easier to use their main social and SMS apps as both payment and financial services providers. In rural areas, WeChat's popularity among first-time smartphone owners makes this trend likely to be even more pronounced.

4.3 Online mode upgrade

Nongxin Cloud.

Application of Internet manufacturers in rural areas - taking tree root interconnection internet company as an example.

The root cloud platform under Tree Root Internet can provide digital transformation services in intelligent manufacturing transparent factory management, machine online management (service, intelligent manufacturing, R & D, energy), industrial chain platform, industrial AI, equipment financing and other aspects. Tree Roots Interconnection closely follows the pace of promoting the transformation and upgrading of the manufacturing industry and the construction of intelligent manufacturing parks across the country, and has launched a national layout. At present, it has landed in Guangzhou and settled in Beijing, Shanghai, Changsha, Suzhou, Xi'an, and Chongqing. The concentrated bearing area of China's advanced manufacturing industry, the Beijing-Tianjin-Hebei, the Yangtze River Delta region and Central China, drives the application of industrial Internet nationwide, and helps China's manufacturing industry to achieve lane change and overtake. The industry chain ecology has created 20 industrial Internet platforms including the foundry industry chain, the injection molding industry chain, the textile industry chain, the customized home furnishing industry chain, and the household plastic products industry chain, empowering 81 industrial subdivisions.

The agricultural solutions provided by Tree Root Internet, Tree Root Internet provides agricultural operators with intelligent agricultural machinery interconnection solutions. Remote monitoring, operation and maintenance and health management of networked agricultural machinery equipment greatly improve the use efficiency and maintenance level of agricultural machinery. With the advent of the Internet of Things era, smart agriculture has been vigorously promoted, not only in terms of policy support, but also in terms of technology. The Agricultural Internet of Things has arrived. Smart agriculture aims to promote the informatization of agricultural production. Effectively realize the industrialization of agricultural production, improve land utilization rate and unit output, promote agricultural income, and guide farmers to achieve precision agriculture through intensive cultivation.

The development process of smart agriculture has these obstacles: (1) The agricultural Internet of Things is a high-tech and high-market industry, which requires a lot of financial support: (2) The agricultural industry has long lacked informatization training, lack of data accumulation, and lack of relevant awareness: (3) The cultural quality of agricultural practitioners is not high enough, and it is necessary to increase the scientific and technological training of farmers: (4) The Internet of Things links the knowledge of agriculture, science and technology, market, and management. How to realize compound management is difficult^[6].

4.4 Smart Supply Chain

Supply chain finance of agricultural products is one of the ways to solve the problem of "fund difficulty" in agriculture, rural areas and farmers. A characteristic model is proposed to evaluate the risk of production, processing and marketing of agricultural products. It can improve the lack of funds for farmers and enterprises. Based on the uncertainty information processing method of D-S theory^[7] and its data combination rules, this model is put forward in combination with the "discount rate" modified model, including the agricultural product supply risk assessment index system - chain finance, giving full consideration to production, processing, marketing, supply chain cooperation and collateral. Finally take the taro supply chain as an example. The risk assessment of supply chain finance based on this model is discussed in detail. The results show that the model and its algorithm are practical and feasible.

5. Analysis of countermeasures for the development of rural e-commerce industry

5.1 Focus on brand building

Compared with the single legal protection function of trademarks, brands have rich connotations and corresponding promotional functions and business functions ^[8]. The promotion function and operation function of the brand plays an important auxiliary role in the ultimate purpose of e-commerce live broadcast sales of products to obtain profits, and are also of great significance to farmers to increase income. At the same time, the brand-building process of rural e-commerce live streaming is also a process of continuous improvement of user stickiness, popularity, recognition and reputation, and in the current fierce market competition, brand building is particularly important and critical to sustainable development of e-commerce live broadcast^[9].

In the minds of consumers, branding always represents the guarantee of product quality and safety. Junpu E-commerce Village of Jieyang City should strengthen the construction of branding, constantly improve the certification standards of "green, organic, pollution-free" and other agricultural products, establish and improve the quality and safety inspection and testing system of agricultural products, establish and improve the traceability mechanism of agricultural products, and constantly improve the guarantee ability of brand agricultural construction. Vigorously implementing the standardization of modern agricultural products and ensuring the quality and safety of agricultural products is a key link of the brand construction of rural revitalization. Pay attention to quality improvement, brand building, take the road of "quality revitalizing agriculture, brand strengthening agriculture" brand construction of rural revitalization, tell good brand stories, spread good local culture, will further expand the development space of agricultural industry, let more agricultural brands become famous brands and go to the world, and help rural revitalization continue to push forward in depth.

5.2 Improving Modern Logistics

It is proposed in the Implementation Opinions of the Ministry of Transport on Consolidating and Expanding the Achievements of Poverty Alleviation in Transportation and Comprehensively Promoting Rural Revitalization issued on May 28, 2021: To fully implement the spirit of the Central Rural Work Conference and the National Poverty Alleviation Summation and Commendation Conference, further consolidate and expand the achievements made in poverty alleviation in transport, comprehensively promote the implementation of the rural revitalization strategy, and speed up the building of China into a transportation powerhouse. The strengthening of transportation enables agricultural products to be delivered to major wholesale markets, supermarkets and consumers more quickly. Efficient and convenient integrated logistics is the top priority. Rural areas should actively

support the connection between relevant logistics infrastructure and online sales platforms to reduce logistics costs and improve logistics efficiency. For example, Jiangxi explores the integrated express logistics mode, integrates express circulation enterprises and trade circulation enterprises through the network platform, realizes the online docking and real-time sharing of freight supply and demand information, integrates the scattered freight market, accelerates the speed of goods leaving the port, improves the warehouse utilization rate, and opens the direct delivery line, which has launched the local characteristic brands such as Jiangxi navel Orange.

5.3 Breaking the ideological shackle

At present, some farmers do not have a strong sense of subjectivity and have a vague understanding of the rural vitalization strategy, while some farmers do not know how to participate in rural vitalization or are not confident in their own abilities and effects, which hinder the motivation of farmers to realize rural vitalization and the implementation of rural vitalization. We can publicize some successful cases of getting rich in e-commerce in rural areas, so as to enhance farmers' self-confidence. At the same time, we can strengthen skills training for farmers and timely communicate with them to encourage them to actively participate in the e-commerce industry.

5.4 Recruit excellent talents

People are the key to rural revitalization. All regions and departments should put the development of rural human capital in the first place, vigorously cultivate local talents, guide urban talents to the countryside, promote professional talents to serve the countryside, attract all kinds of talents to make contributions in rural revitalization, and provide strong talent support for comprehensively promoting rural revitalization and accelerating the construction of an agricultural power.

6. Program Feasibility

6.1 To verify the feasibility of the scheme, we conducted a questionnaire survey on rural groups with a sample size of 200 people.

project	content
Foundation of development	County digital village has a good
	foundation for development
Development situation	The digital rural index of counties in China
	reached 55 in 2020, an increase of 6
	percent over 2019
The five provinces with the highest level of	Zhejiang(83), Jiangsu(70), Fujian(69), Shand
development	ong(66)and Henan(66)
The fastest annual growth rate of 5 provinces	Mongolia (11%), Tibet
Inner	(10%),Ningxia(10%),Gansu(9%)and He
	North(7%)

Table 2: County digit	al village development data
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1) As shown in Table 2. According to the survey, the Internet economy is still under development in rural areas even after the completion of urban construction. Rural areas still need to continue to develop, and villagers still have a strong demand for public digital construction, which reversely proves that the digital construction of basic public services in rural areas is not in place. According to the chart, 45% of the people have reported some problems to the village or the government, while

55% have not. It can be seen that there are still many people who believe that there are some problems in rural construction or other aspects, which indicates that the government policies are not implemented in place, or the degree of propaganda of some policies is not high enough to completely solve the problems of farmers and meet the needs of farmers.

2) There are 77% of people who still don't know about the construction of digital villages, and the total number of people who answer that I don't know and don't know reaches 77%. It can be seen that rural areas have not carried out a key explanation on the digitization of digital village construction, and people have not realized the benefits of digital village construction.

3) Nearly 1/3 of the population have no rural life experience, which reflects the reduction of understanding and social contact with the surrounding people, and 30% of the rural population have no rural experience, which indicates that there is an age gap under the premise of the development of agricultural population, which has not been well connected in the past ten years, which also shows the general environment of population loss. Even more than half of the population's understanding of rural areas is decreasing year by year, and not one third of the population even has no rural life experience, and there are no relevant rural background to people or events in the life matrix he understands and within the radiation range of life, resulting in the lack of corresponding social attention to agricultural development, and the unequal status of urban and rural areas.

4) Social media and online finance are strongly related, and the relationship between social media and online finance is increasingly close. With the continuous development of the Internet and technology, people gradually began to regard social media as an important source of information and resources, and also as a channel for investment and wealth management. On social media, people can get the latest information about the financial market and help others make decisions by sharing their investment experience and views. In addition, online financial companies are also expanding their customer base through social media to attract more investors. They make more and more people choose to invest online by providing convenient investment tools and promoting them on social media. This connection also brings some new investment opportunities, enabling investors to obtain more information on social media, so as to better evaluate investment risks and returns.

5) In general, the relationship between social media and online finance is driving the development of the financial market and bringing more convenience and opportunities to investors. In the future, this relationship may be further strengthened and have an impact in more areas. Up to 72% of people choose WeChat payment as an effective way to carry out their rural Internet financial life. More than half of the people still do not trust or understand rural insurance and have a low positive attitude towards insurance. However, it is worth noting that according to the survey, more than half of the rural groups did not fully understand the insurance at first and did not pay enough attention to it and did not fully understand the convenience it can bring to their lives, resulting in the inequality of resource information with the contemporary society. For example, the long-term form of insurance in the city has not been properly displayed in the agricultural environment, and 51% of the people still take a wait-and-see attitude towards financial services and social insurance.

6) 30% of people pay for online services, and 70% of them use offline payment. It can be seen from this that compared with offline payment, the learning difficulty and adaptability of online school payment are relatively low for rural people. We should improve the learning enthusiasm of rural people, strengthen the cultivation of the awareness of agriculture, rural areas and farmers and the system construction of entrepreneurial forms, actively introduce new awareness, model and mobilize rural learning enthusiasm, and drive the elderly with young people, Or in the form of the elderly driving the elderly, the government members should deepen the education of the individual elderly first, and finally realize the learning atmosphere formed by the education of the individual elderly to the surrounding. The Wuchang learning community allows the elderly to learn independently in a comfortable self-circle, which will form a good online learning atmosphere and online learning

platform, and will release more people from ordinary and unnecessary heavy jobs to invest in the food industry. The cost of customer service learning extends from the social community to the government propaganda. In implementing the government propaganda to every household to drive rural people to learn online payment, but it cannot be carried out in a one-size-fits-all way. The transition form of learning and offline coexistence should be adopted to reduce the learning threshold, simplify the online payment interface and finally achieve one-click.

7) According to the research data, 31% of people choose to pay their electricity bills online, while 69% choose to pay their electricity bills offline. The reason may be that the application operation of paying electricity bills is complex, the platform is not simple enough, or because people tend to pay their electricity bills offline because of the small scale and low travel costs in rural areas. In order to improve this problem, the rural government should vigorously support and cultivate rural people to use online payment as a more convenient way. For some elderly people with weak learning ability, specialists can be arranged to teach them hand in hand.

8) The digital construction of rural construction is more than half understood, which reflects that most people have only heard the vague concept of the digital construction of their own counties and counties, and do not know that the rural construction includes the specific content of the construction. It is urgent to improve the rural villagers' awareness of digital construction. The publicity model should not be superficial, but should be implemented in three aspects of work and life education.

6.2 Project implementation process planning:

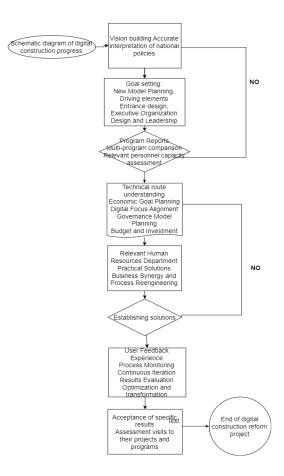


Figure 2: Village strategic layout plan

The establishment of clear vision and objectives is the key to rural digital construction.

As shown in Figure 2. Through capacity assessment, we can better understand the current situation of rural digital development and provide a basis for setting goals. Next, in the planning of the new digital model, we should determine the driving factors and entry points to ensure the effectiveness and feasibility of rural digital construction. Moreover, in order to achieve the goal of digital construction, it is necessary to design an appropriate executive organization and leadership governance model to ensure the smooth progress of rural digital construction. In terms of business goal planning and digital focus setting, we need to pay attention to the reconstruction of business models and the determination of technical routes, so as to ensure the benefits of rural digital construction. In addition, budget and investment are also a very important part of rural digital construction. In the implementation process of rural digital construction, it must be carried out continuously and set reasonable milestones in the implementation process to ensure the smooth progress of rural digital construction. At the same time, feedback on user experience is also very important.

The vision and objectives of rural digitalization are defined, the current capacity is evaluated, and the specific digitalization objectives are defined. Next, carry out a comprehensive planning on the digitalization model, clarify the elements and entry points driving rural digitalization, and design the implementation organization and leadership governance model based on the current situation, so that the whole process can be carried out effectively. At the same time, the focus of digitalization has been clarified and the business model has been reconstructed to ensure the successful implementation of digitalization. The technical route is also an important factor, which needs to be determined in combination with the actual situation of rural areas. At the same time, budget and investment are also factors that cannot be ignored. It needs to be planned in combination with the long-term goal of rural digitization. In the process of implementation, it is necessary to carry out continuous deployment, set milestones and provide feedback on user experience to ensure that digital services can meet the needs of users. At the same time, we should comprehensively consider business collaboration and process reengineering, implement organizational transformation and cultural change, and make the digitalization process smooth.

7. Conclusion

Through the continuous improvement of the rural Internet system and the application of digital reform in rural public facilities, it can effectively improve the happiness of rural people, and the research conclusions of this paper also confirm that rural digital construction is the only way on the road of rural revitalization, and the emerging concepts of finance and e-commerce to upgrade traditional industries and create a beautiful countryside on the core of people-oriented is the common vision of society. The development of rural e-commerce and finance will also become a major boost to rural revitalization in the new era.

References

^[1] Peng Chao, Ma Biao, Zhang Chen. Poverty alleviation through e-commerce: Village involvement and demonstration policies in rural China [J]. Journal of Integrative Agriculture, 2021, 20(4)

^[2] Zhong Xuemei, Ferrand Clermont. Construction of Agricultural Products of e-Commerce Ecological Network System under the Background of "Internet Plus" [J]. Wireless Communications and Mobile Computing, 2022.

^[3] Hui Jia, Han Zhang^{*}, Yang Yu, Dongyang Xu, Huan Wang. The Influencing Mechanism of Social Capital on the Identification of Entrepreneurial Opportunities for New Farmers DOI: 10.4236/ajibm.2020.1012114

^[4] Chen Liangmin, Zhang Weiwei. Research Status and Trend of Financial Support for Rural Revitalization —Based on CiteSpace Knowledge Graph Analysis Journal of Chongqing University of Technology (Social Science) doi: 10. 3969 /j.

issn.1674-8425(s). 2022 12.018

[5] Tyler Aveni. China's Alipay and WeChat Pay: reaching rural users (Chinese) CGAP 1818 H Street, NW MSN IS7-700 Washington, DC 20433 USA 2017.12

[6] Hu Bin, Li Jie. Research on the Relationship between Digital Inclusive Finance and Rural Inclusive Growth DOI: 10.12677/FIN. 2020.104026

[7] Yuan Zhang, Lian Duan, Gefu Zhang. Risk Assessment of Agricultural Products Supply-Chain Finance Based on D-S Theory DOI: 10.4236/ajcm. 2014.44031

[8] Treiblmaier Horst, Sillaber Christian. The impact of blockchain on e-commerce: a framework for salient research topics [J]. Electronic Commerce Research and Applications, 2021(prepublish)

[9] Liu Jingwen. Research on the brand building of rural e-commerce live streaming under the background of rural revitalization [J]. SHS Web of Conferences, 2023, 155.