Digital Economy Empowers the Development of Rural Revitalisation Strategy

Shaoqing Ren, Deqin Chen, Xiangyu Du and Shengzhuo Zeng
School of Anhui University of Finance and Economics, Bengbu 233000, China

Abstract
In the report of the 20th Party Congress, it is necessary to accelerate the deep integration of the digital economy with the real economy, promote the development of the digital economy in the rural area, and empower rural revitalization. When the countryside thrives, the country thrives, and digital countryside is a strategic direction to promote rural revitalization. With the implementation of the rural revitalisation strategy, the digital construction of the countryside has been put into the construction field which is highly valued by the state and society, and the organic integration of the digital economy and the rural industry has become the focus of research nowadays. In the context of rural revitalisation, promoting the digital rural revitalisation plan is conducive to promoting rural industrial development, urban-rural integration and the modernisation of the rural governance system. The development of the digital economy has brought opportunities for the digital transformation of rural industries. However, there are still a series of problems in the development of the rural digital economy, which are constrained by the weak digital transformation capacity of the countryside, imperfect digital construction equipment, lack of high-quality rural talents and low digital literacy of farmers. This will lead to a new situation of urban-rural integration and the overall development of the digital countryside.

Keywords
Rural Revitalization Strategy; Digital Countryside; Mechanism and Path.

1. Introduction
With the development of cloud computing, Internet of Things, regional chains, artificial intelligence, fifth-generation mobile communications and other representative digital high technologies, the digital economy has become a new economic form after the agricultural and industrial economies, and is an important driving factor for China's economic development. The development of the digital economy will have great potential to change the scale of China's economy, industrial structure and economic behaviour. At the same time the digital economy also provides a strong development for rural areas to achieve leapfrog development and modernisation of agriculture and rural areas. The report of the 20th Party Congress proposes to "accelerate the building of a digital China". General Secretary Xi Jinping stressed the need to build a digital economy with data as a key element, promote the industrialisation of digital and digitalisation of industry, and guide the deep integration of the digital economy with the real economy. The 14th Five-Year Plan for the Development of the Digital Economy, issued in December 2021, also provides planning and guidance on the development path of the digital economy, which shows that using digital innovation technology to lead the development of the economy is the core of enhancing the competitiveness and influence of China's digital economy. In the face of the impact of the new pneumonia epidemic, the reshaping of the international landscape and the need to restore economic dynamism, the digital economy has become a new driving force for global economic development.
2. The Basic Meaning of the Digital Economy

2.1. Digital Economy

The digital economy is about making the best use of data, analysing large amounts of data to identify specific and feasible knowledge and information, applying it to the required industries and making full use of resources to achieve high-quality economic development. The digital economy is based on various data resources, making full use of emerging technologies such as big data, cloud computing, 5G networks, artificial intelligence, the Internet of Things and blockchain, and making full use of various factor resources to influence the production methods of various industries and people's lifestyles. The digital economy has three distinctive features that distinguish it from the traditional economy: (1) high efficiency. The digital economy is able to ignore the limitations imposed by time and space, and is able to transfer information as quickly as possible, connecting people quickly through high technology and thereby speeding up the efficiency of information processing. (2) High integration. The digital economy can blur the boundaries of the three traditional industries and make them more integrated. (3) Flattening. The digital economy can reduce the process of information transmission, so that people can be directly connected, reduce the organization of intermediate departments, so that the organization is flatter, and at the same time reduce the distortion of information.

2.2. Rural Revitalization

The strategy of revitalising the countryside is a strategy proposed by Comrade Xi Jinping in the report of the 19th Party Congress on 18 October 2017. At the same time, the report of the 19th Party Congress pointed out that the issue of agriculture, rural areas and farmers is a fundamental issue related to national planning and people's livelihood, and that we must always make solving the "three rural issues" as the top priority of the work of the whole Party and implement the strategy of revitalizing the countryside. Although China's economic development has achieved world-renowned results, it is still a traditional agricultural country, and in the current economic development, we still need to focus on agriculture and rural farmers. In general, the revitalisation of the countryside is to achieve industrial revitalisation, talent revitalisation, cultural revitalisation, ecological revitalisation and organisational revitalisation, and to come out with a socialist road of rural construction with Chinese characteristics.

3. The Mechanics of Digital Economy Enabling Rural Revitalisation

![Figure 1. Intrinsic mechanism of digital economy empowering rural revitalization]
The application of digital economy in the field of agriculture and rural farmers can not only effectively change the one-way outflow of rural factors and improve the accessibility of rural factors, but also promote the upgrading of rural governance mode. The development of rural digital economy can help promote rural industrial development, rural talent pool, rural cultural revitalisation, rural ecological optimisation and rural organisational upgrading in five main aspects to promote rural revitalisation development, the inner mechanism of which is shown in Figure 1.

3.1. Rural Industrial Development
The development of rural industries is the core work of the rural revitalization strategy. To implement the rural revitalization strategy, it is necessary to economically develop the rural industrial system. The application of digital economy helps to improve the application of big data, fifth-generation mobile communication and other technologies in rural industries, thereby promoting rural industries towards a higher level of development and realizing a well-structured modern rural industrial system. Under the role of the digital economy, modern industrial elements are rapidly integrating with traditional rural industries, promoting a modern industrial system of digital management, digital production, digital transport and digital marketing in rural industries. In particular, the role of digital finance in rural industries has improved strong support and access to financing for rural industries. Broadening the development path for rural industries.

3.2. Rural Talent Pool
Talent is a valuable resource for economic development. The development of the rural economy and the implementation of the rural revitalization strategy are inseparable from the cultivation and reserve of talents, which is the core competitiveness of a place’s development. Talent is the core competitiveness of a place’s development. The only thing that is important for government is to get talent. Talents are the leading force of economic development. Talent revitalization is an important factor in the rural revitalization strategy. At present, there is still a shortage of talents for rural development that needs to be addressed urgently. The development of the digital economy has led to the widespread use of the Internet in rural areas, which has passed an important channel for cultivating high-quality rural talents. Through digital technology, farmers in rural areas can also receive advanced education and training, breaking through time and geographical restrictions, while reducing the cost of cultivating rural talents, which is conducive to reducing the retention of high-quality rural talents, enhancing the reserve of rural talents and providing a talent base for the rural revitalisation strategy.

3.3. Rural Cultural Revitalization
Rural culture is not only a source of spiritual strength for rural residents, but also an important influencing factor for rural revitalisation. Rural culture is a lasting driving force for rural revitalisation, and rural revitalisation cannot be achieved without the leading role of cultural revitalisation. Cultural revitalisation is the soul of rural revitalisation. Through the carrier of culture, it can strengthen rural cultural confidence and provide strong support for rural revitalisation. In the form of Internet+culture, the Internet is used as a communication carrier, relying on digital and networked media to realise the widespread dissemination of rural culture in the countryside. It enriches online cultural resources while meeting the spiritual needs of farmers, further stimulating rural cultural vitality and promoting the rural revitalisation strategy.

3.4. Ecological Optimization of the Countryside
The vast countryside is still a green ecological environment, and green mountains are golden mountains further reveal the intrinsic link between economic development and the ecological
environment, protecting the ecological environment is to protect productivity, improving the ecological badlands is to develop productivity, and the two are inextricably linked. Through the application of the digital economy, the establishment of an all-round detection of the rural ecological environment, real-time detection of rural pollution emissions, to avoid the environmental pollution that should be produced, to help the development of rural ecology more optimised, while making agricultural products greener, to promote the construction of ecological agriculture, thus promoting the comprehensive revitalisation of rural ecology.

3.5. Upgrading of Village Organizations

The implementation of the rural revitalization strategy cannot be achieved without the Party's grass-roots organizations, which are the backbone of rural construction. The digital economy has an important role to play in promoting the construction of rural grassroots party organizations, connecting government affairs with the Internet, realizing the new organizational management mode of Internet + government affairs, truly realizing the service concept of "more data, less running for the masses" through online intelligent management and digital applications, and promoting the development of rural e-government. It will improve the governance efficiency and service level of rural grassroots organisations and realise the revitalisation of rural organisations.

4. Major Barriers to the Rural Digital Economy

4.1. Insufficient Digital Technology Construction

As of mid-2021, China's current rural Internet penetration rate is only 59.2%, with a rural Internet user population of 297 million, which is still a large gap compared to the urban Internet penetration rate of 79.8%, and there is still a huge gap between the rural network infrastructure and the towns, and there is still a huge gap compared to the urban Internet construction, in the current urban cloud computing, Internet of Things, regional chains, artificial intelligence, and The rapid development and application of fifth-generation mobile communications, but in many rural areas fourth-generation communication technology has the defect of unstable signals, not to mention the application and popularity of fifth-generation mobile communications and the application of high-technology such as regional chains and artificial intelligence. The rural digital infrastructure needs to be urgently strengthened.
4.2. Insufficient Rural Digital Talent
With the application of the digital economy in rural areas, it is true that the development of the countryside has brought about entrepreneurship and jobs that have led to the return of some digital talents to the countryside, but there is still a huge gap in terms of the number of digital talents compared to those absorbed by the non-farm jobs created in the cities. With China’s current ageing population and accelerating urbanisation, it is difficult for the remaining rural workforce to master new technologies and there is a shortage of professional digital talent. In particular, many rural areas are hollowed out, and the working conditions and wages in rural areas are at a disadvantage compared to those in cities, making it difficult to attract and retain talent in rural areas, and many digital talents are reluctant to return to their hometowns after leaving farming, but stay in cities to work, further increasing the gap in rural digital talent.

4.3. Lack of Digital Awareness Among Farmers
At present, in the vast rural areas, although the popularity of the Internet of Things has accelerated and popular services have expanded, most farmers are only interested in digitalisation as an application in their daily lives and are not aware of the role of digital economy in promoting rural revitalisation, and are unable to apply digital economy to rural industrial development, and few are able to realise the impact that digital economy may bring to rural industrial development. The digitisation of industries will undoubtedly bring about dramatic changes to the rural economy, but the lack of awareness of digitisation among farmers, their lack of understanding of digitisation leads to distrust of digitisation and their inability and unwillingness to use digital construction, which restricts the development of the rural digital economy.

4.4. There are Security Risks in the Digital Network
In rural areas, the Internet is the main platform for the development of the digital economy and plays an important role in the digital construction of rural areas, but due to the weak infrastructure of the Internet in rural areas, and due to the open and hidden nature of the network, there are network security loopholes in the development of the digital economy in rural areas, and due to the late popularisation of the Internet in rural areas, resulting in a set of feasible regulatory standards not being established in rural areas, the network regulatory mechanism is not perfect, and there are certain Potential risks. At the same time, most farmers do not have the awareness and ability of network security, further increasing the hidden risks of rural digital networks.

5. Pathways for the Development of the Rural Digital Economy

5.1. Promote the Development of Digital Infrastructure in Rural Areas
At present, the digital infrastructure in rural areas still has a huge shortage of elements, the fourth generation of communication technology is not yet fully covered, there are fewer high-tech applications such as cloud computing, Internet of Things, regional chains, artificial intelligence and fifth generation mobile communications, and the rural Internet penetration rate is only 59%. It is therefore necessary to accelerate the construction of digital infrastructure in rural areas and promote full coverage of rural networks. The government should provide good policy support, increase support measures for the development of the rural digital economy and optimise the environment for rural digital construction, while increasing financial support and setting up special funds for rural digital development to support the construction of digital infrastructure in rural areas. It also encourages the role of leading digital enterprises in promoting the development of the digital economy, playing the role of enterprises and promoting the entry of social capital to strengthen infrastructure construction.
5.2. **Focus on Digital Talent Development**

To promote rural digital construction cannot be done without the support of rural digital talents, improve the construction of rural digital talents and improve the power of talents to transform digital into rural revitalisation. To strengthen the training of digital talents, we should make full use of Internet resources to train new digital talents and improve the digital concept and level of farmers through digital training for them. At the same time, the level of treatment for talents should be improved, so as to be able to attract high quality talents as well as to retain them and reduce the problem of rural brain drain.

5.3. **Strengthening the Concept of Rural Digitalisation**

At present, not only do farmers lack the concept of digitalisation, but many rural infrastructure organisations also lack the concept of digital construction. It is necessary to promote the change of concept of rural infrastructure organisations and farmers only, strengthen the concept of digitalisation and cultivate digital awareness. The government should actively promote the concept of digital construction to farmers, while allowing farmers to participate in digital construction, so that they can directly experience what digital construction is and the development results it brings, and raise their digital awareness and digital literacy through various means.

5.4. **Strengthening Rural Digital Security**

At present, there are loopholes in the security of rural digital development. While building a digital rural area, the issue of network security cannot be ignored, and to effectively safeguard rural digital network security, the government should improve relevant laws and regulations, establish a perfect system, purify the network environment and provide security for digital construction. At the same time, it is necessary to strengthen rural farmers’ awareness of network security training, improve network security awareness and strengthen network security skills to ensure digital network security.

6. **Conclusion**

Digital technical support can promote better implementation of rural revitalization. Driven by the digital economy, it can drive the upgrading of rural industries, accelerate the training of rural talents, improve the ecological badlands in rural areas, raise farmers’ income and promote the effectiveness of rural governance. In the context of the rural revitalization strategy, it is necessary to strengthen the construction of the rural digital economy, so that the rural digital economy can empower rural revitalization.

**References**


