

6 Review & Analysis

THURSDAY AUGUST 19 2021

'Digital China' empowers rural vitalization

SOCIOLOGY

By SHI SHENGXU
and CHEN HAO

Since the 18th CPC National Congress, China has given particular attention to the development of digital technology and vigorously pursued the "Digital China" initiative. It is an important strategy for national IT application in the new era, and an important measure to meet people's ever-growing needs for a better life.

In his congratulatory letter to the First Digital China Summit in April 2018, Chinese President Xi Jinping stressed that building a digital China is necessary to adapt to the new historical juncture of China's development, and he called for fostering new driving forces through information technology, to promote new development and make new achievements.

In particular, digital technologies represented by big data, artificial intelligence, and cloud computing are of great significance to the overall vitalization and innovative development of rural regions.

Policy support

Digital technology is the driver of rural vitalization, and also the foundation of agricultural and rural modernization.

In 2019, the general offices of the CPC Central Committee and the State Council jointly published guidelines to promote the application of digital technologies in rural areas to boost local development. It vowed to accelerate the construction of IT infrastructure in rural areas, upgrading rural internet facilities and information services.

Meanwhile, more efforts will be made to boost the rural digital economy, with wider use of digital technologies in agriculture and the development of e-commerce and various emerging creative industries in rural regions. It also planned to lend more support for rural technological innovation, and strengthen ecological protection in rural areas with digital technologies.

In 2020, the 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 proposed to accelerate the construction of digital villages, build a comprehensive information service system for agriculture and rural areas, establish inclusive service mechanisms for agriculture-related information, and promote the digitalization of rural management services.

On Feb. 21, China released the "No. 1 Central Document" for 2021, stressing the efforts to comprehensively push forward rural vitalization and accelerate the modernization of agriculture and rural areas. It aimed for better rural public infrastructure and basic public services, stronger rural consumption, and faster urban-rural integration within counties.



Visitors tour the digital planting base at the 8th Beijing International Irrigation Technology Exhibition at Beijing National Convention Center in Spring 2021. Photo: CFP

All in all, we can rely on the Digital China initiative and digital technologies to empower high-quality rural vitalization and enhance people's sense of fulfillment, happiness, and security.

Ease talent shortage

Digital technology provides a talent guarantee for rural vitalization. Before the digital era, due to the unbalanced allocation of urban and rural education resources, rural education facilities were relatively weak, and teachers were insufficient, which constituted the main weaknesses restricting the cultivation of rural human resources.

After the advent of the digital era, digital technology has empowered rural education to a certain degree. High-quality educational resources are now imported to the countryside at a lower cost through online sharing platforms, serving as an important way to break through the bottleneck of rural talent cultivation.

Online courses such as cloud classrooms and MOOCs can share high-quality educational resources without the limitation of time and space, lowering the entry threshold of rural education, and to a certain extent, easing the inequality in rural education.

In addition, many digital platforms have been established to provide non-profit training for returning college students, veterans, start-up entrepreneurs, and rural youth, giving rise to a group of new professional farmers who love agriculture, understand technology, and are good at management.

Village-enterprise cooperation

Digital technology has injected new momentum to accelerate the construction of an open and shared digital agriculture cloud platform. As it turns out, digital information is endowed with higher value in the dissemination of the virtual space.

In recent years, a rural "online traffic economy" based on big data has come into being, forming a two-way interaction between rural culture and emerging livestreaming culture. "County mayor selling products," "rural cuisine eating show," and "rural landscape livestreaming" have gained wide popularity, creating a wave of rural "online celebrity economy" and injecting new vitality into rural economic development.

In the new era, governments at all levels spare no effort to accelerate the construction of 5G, artificial intelligence, Internet of Things, and other infrastructure and supporting facilities in rural areas by cooperating with private capital and purchasing services. At the same time, they actively invite various types of digital enterprises to play a leading role in rural vitalization, such as building rural network infrastructure and rural e-commerce platforms, so as to realize extensive and in-depth "village-enterprise cooperation."

On this basis, many villages strive to build a multi-dimensional resource exchange platform based on digital technology to promote the mutual transformation of data and other resources, and form a complete chain from online transaction to offline circulation. Information flow then drives the flow of capital, technology, talent, and goods, so as to activate multiple elements in rural areas, better translate digital technology into real cash, and drive the development of the rural digital economy.

Industrial vitalization

With digital technology as the core driving force, the construction of an "Internet Plus" modern agricultural system progresses effectively, along with smart villages, digital agriculture, creative agriculture, and smart tourism in accordance with local conditions. Therefore, the integrated development of primary, secondary,

and tertiary industries in rural areas can be achieved through the deep integration of digital technology with the real rural economy.

Through the introduction of digital technology to the countryside, rural industries can be upgraded toward digitalization, networking, and intelligence. The collection and calculation capacity of digital technology will make decision-making and analysis more accurate, thus improving production efficiency in rural regions. Furthermore, it can also help prevent environmental risks through sensors placed in the field.

Today, the traditional manufacturing industry relies on information technology transformation and upgrading to realize automated production, so that the rural manufacturing industry can be precisely connected with the industrial chain, and the spillover effect of digital technology can be leveraged to promote the vigorous development of the rural service industry. An example within the rural e-commerce economy is "online shopping + offline retail," which is driving the comprehensive development of rural logistics, tourism, catering, and other related industries.

Intelligent governance

With the development of the internet, the acquaintance society based on relationship networks is gradually disintegrating, the established public norms and their binding force are increasingly diminished, and the social interactions between villagers are also reduced by varying degrees. The continuous development of the virtual society has thus weakened the trust built on the traditional order, complicating rural governance and increasing the difficulty of governance.

Digital technologies such as sensors and monitoring equipment can extend human senses, enabling information mining, accurate calculation, fast organization, precise

analysis, and visualization. This will enable a breakthrough of the limitations of inherent thinking patterns and the function of the human body to promote rural wisdom and digital governance.

At the same time, based on digital technology, a positive feedback interaction system between the government and the public is created, which improves the efficiency of the interaction, enhances rural public service capacity, and effectively addresses the demands of the public. Through the boon of digital popularization, rural public services have been, on some levels, upgraded to the rural "internet + e-government service" model, realizing the digital transformation of rural governance innovation, resolving many long-standing rural governance problems, and boosting overall rural governance.

Resource integration

Digital technology is now an important means to promote the integration and upgrading of rural innovation. On the one hand, due to geographical restrictions in rural areas, some resources are fragmented and distributed loosely, resulting in poor rural resource integration. It is necessary to play out the horizontal integration effect of digital technology to integrate rural resources.

On the other hand, digital construction in rural areas started late, and the Matthew Effect produced by digital technology widens the gap between urban and rural areas to a certain extent, forming a barrier to urban-rural integration. Therefore, the vertical integration effect of digital technology needs to be brought into play to promote integrated and innovative development of urban and rural areas.

However, it is worth noting that digital technology is not a one-cure-for-all. Digital technology itself does not have value orientation, so it needs proper regulation and restriction to serve the greater good. Only by putting in place institutional designs can we make up for the disadvantages of digital technology, effectively maximizing its multiplier effect, and making it a tool to boost high-quality rural vitalization.

In summary, the Digital China initiative and digital technologies are expected to push high-quality rural vitalization, bridge the urban-rural talent gap, enhance the value of digital technology and its cash-in capacity, and promote transformation and upgrading of rural industries. In the end, the efforts to develop the digital rural economy and promote the digital transformation of rural governance innovation will achieve the integrated development of urban and rural IT application, ultimately making common prosperity a reality.

Shi Shengxu and Chen Hao are from the School of Public Management at Fujian Agriculture and Forestry University.