Bridging the urban-rural digital divide：Implementation path and strategy based on China's practice

Yan Chen

Yan Chen is a professor and doctoral supervisor in School of Economics and Management at Beijing University of Posts and Telecommunications, and the current director of the International Exchange and Cooperation Department of BUPT. He recevied the PhD. degrees in economics from Jilin University in 2001, then he went to the University of Manchester Business School, Liverpool School of Management, Brunel University as a visiting scholar. He is a well-known scholar in international business and international trade practice area. His research mainly focus on strategic performance and innovation, digital economics and open innovation, internationalization of emerging entreprises, foreign investment, cross-border e-commerce, smart business and paperless trade, squeeze development and higher education, and scietifical education engineering management .
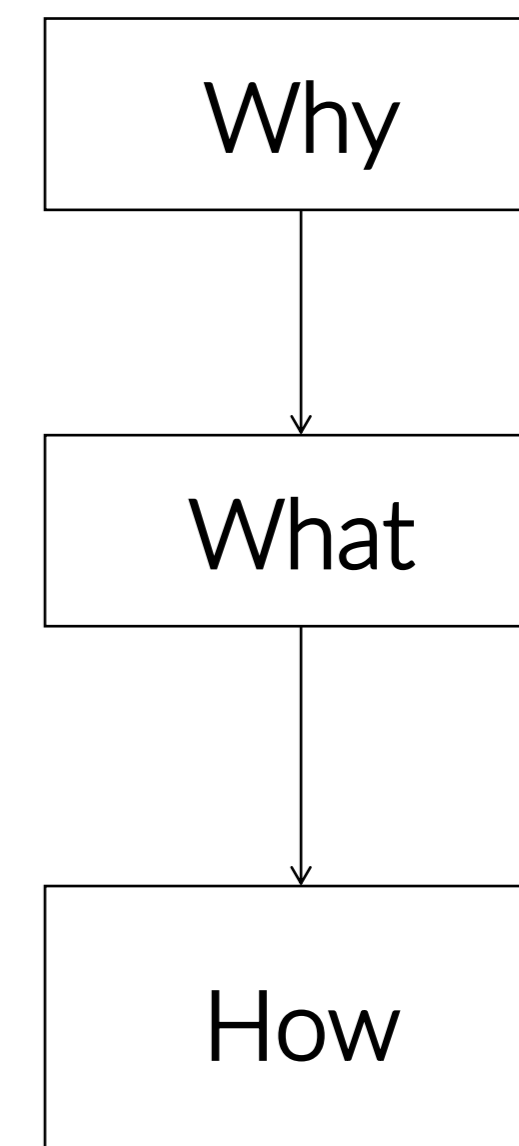
Yan Chen

Joint Workshop on USF
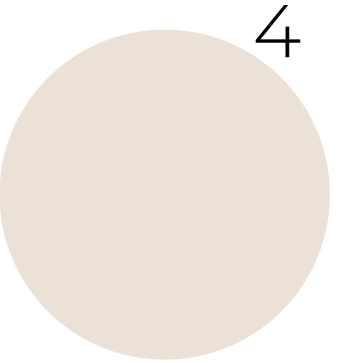
CONTENTS

1.About the Digital Divide

2.Overview of the Universal Service in China

3.China's approach to bridging the Digital Divide with the Universal Service

**4.Recommendations**

Why

What

How

1. About the Digital Divide

Digital Divide

➢ COVID-19 has curbed human mobility like never before, opening the door to the use of digital technologies in an unprecedented way and accelerating the growth of the digital economy.

● On the one hand, the COVID-19 crisis has **accelerated the adoption of digital technologies** in countries that have reached a certain level of digitalization.

● On the other hand, the development and **diffusion of digital technologies** is often unevenly distributed between and within countries, and digital inequality is particularly acute in less developed economies.

● **Therefore, the existence of digital divide makes different groups appear new development gap in the information society, digital divide has far-reaching influence.**
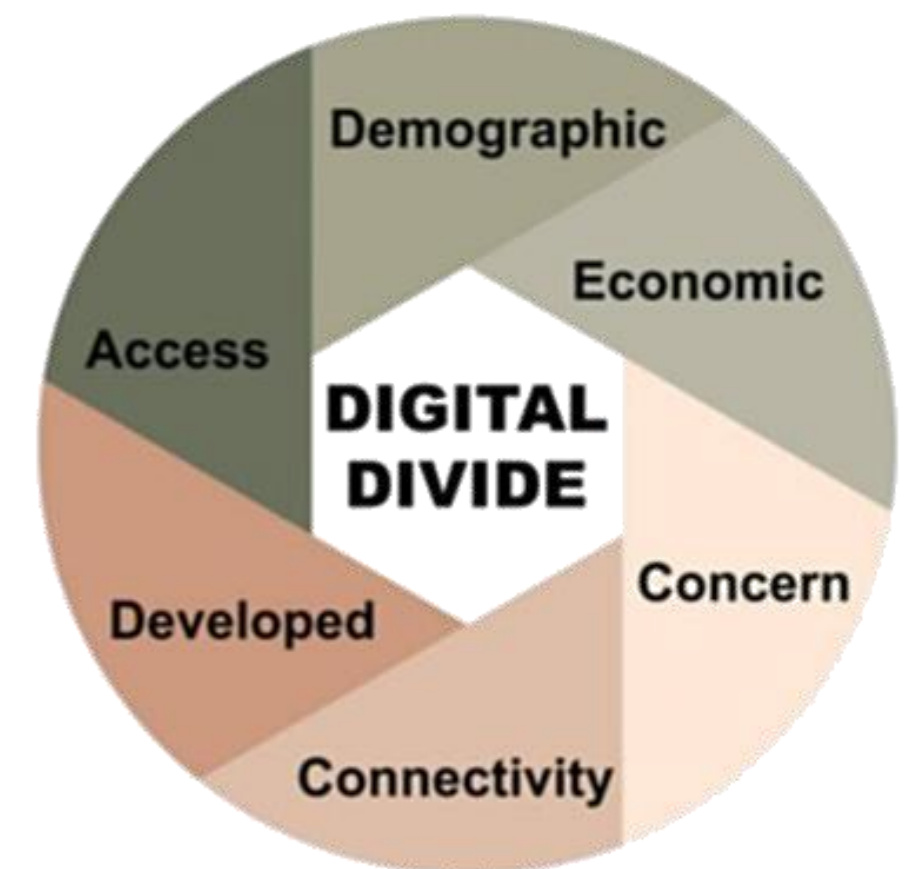
Digital Divide Example

In western China, especially in rural areas, there is no network signal in many places, and some families do not have smart devices to support students to take online courses
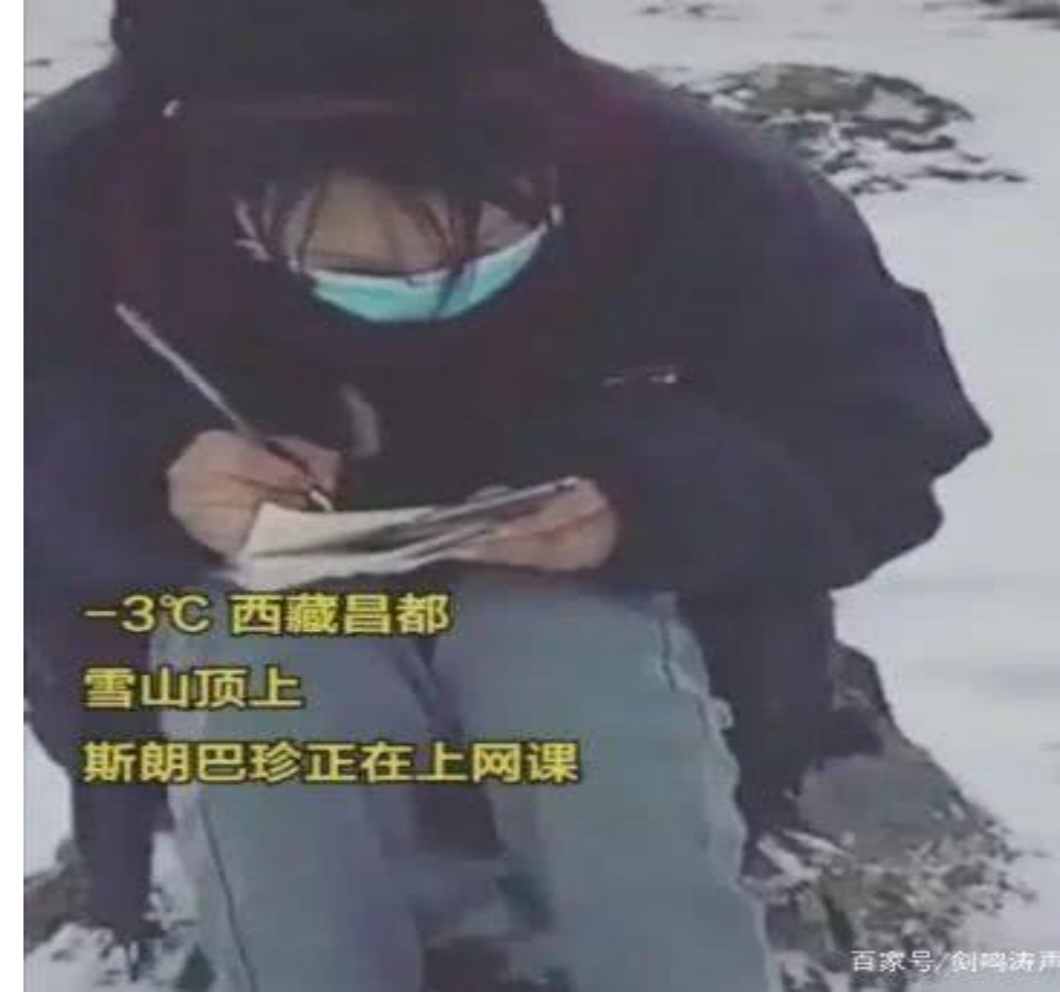
In most cities in China, especially in the east, networks and smart devices are not a problem for many families

Digital Divide Example

For some elderly people who do not have a smartphone or don't know how to use, buying tickets, shopping online, and even entering and leaving the house during an outbreak are particularly difficult

And for young people, using smart devices to shop online, scanning the QR code to show healthy condition is a simple matter

China's dilemma of bridging digital inequality

➢ **The spread of different numerical disadvantages.**

• The digital divide is not only a reflection of digital inequality, but also a reinforcement of inequality at other levels of society, which is gradually becoming a long-standing social divide that is difficult to close.

➢ **The emerging new digital divide.**

• More and more digital technology has penetrated into many fields of social life, and the services of different organizations are increasingly digitized.

➢ **Structural transformation in the digital divide.**

• When digital technology becomes not just a tool but a structural force for social transformation, the digital divide will also become a key factor affecting social development.
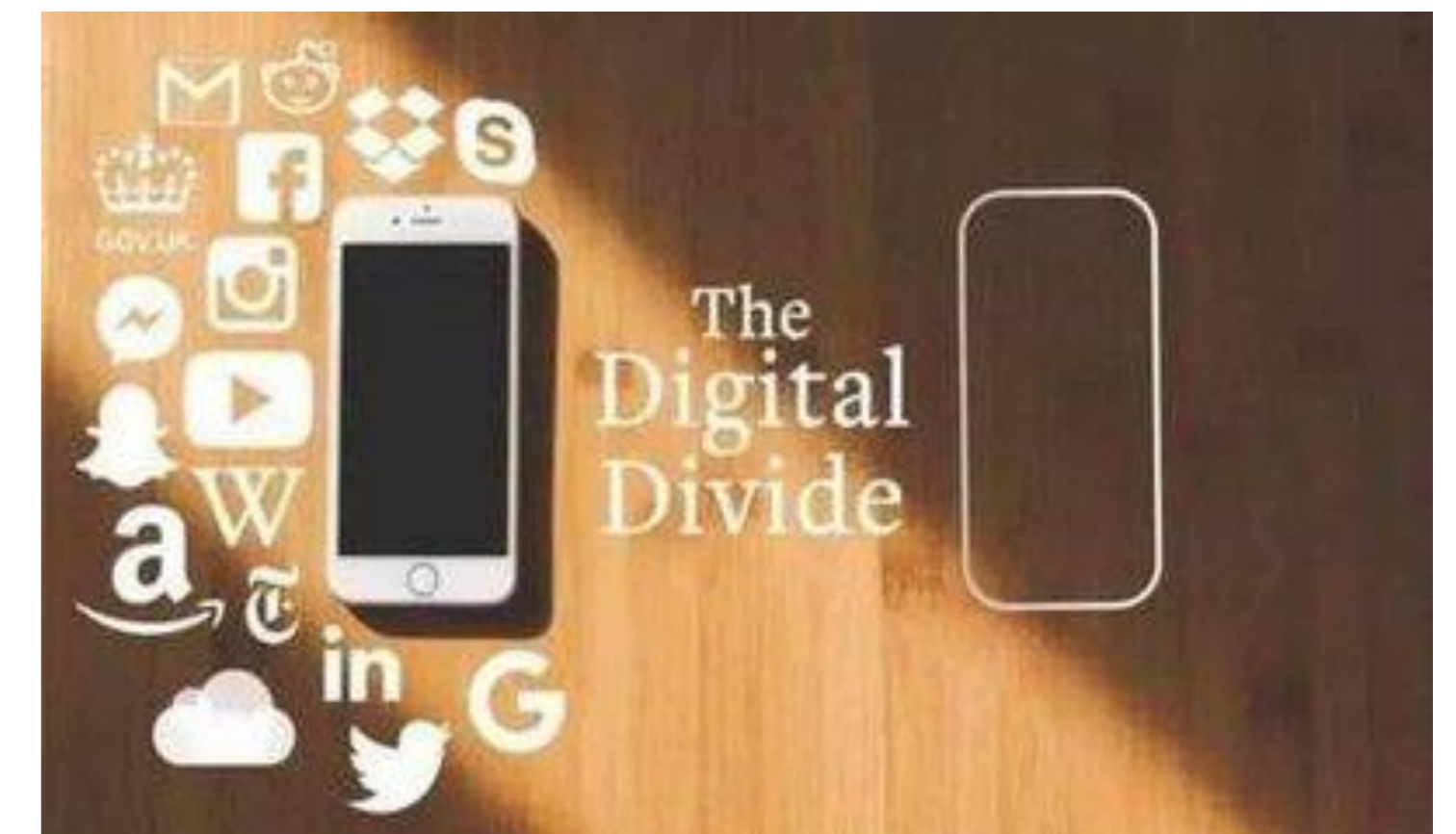
Characteristics of urban-rural digital divide in China

➢ It has effectively improved the coverage of digital technologies in China and **bridged the gap in digital access**.

• By the end of 2022, China had built and put into service **2.312 million 5G base stations**, accounting for more than 60 percent of the world's total. **100%** of administrative villages and villages out of poverty have access to broadband, and over **99%** of administrative villages have access to optical fiber and 4G.

➢ However, **the digital application gap** caused by the difference of residents' digital participation degree, digital application ability and industrial digital level has become an increasingly prominent problem.

• The digital usage gap is highlighted by the gap in personal digital literacy and skills. In terms of application ability, **lack of use skills, limited education level and inadequate equipment** are the main reasons that hinder residents' participation in digital activities, especially for rural residents.
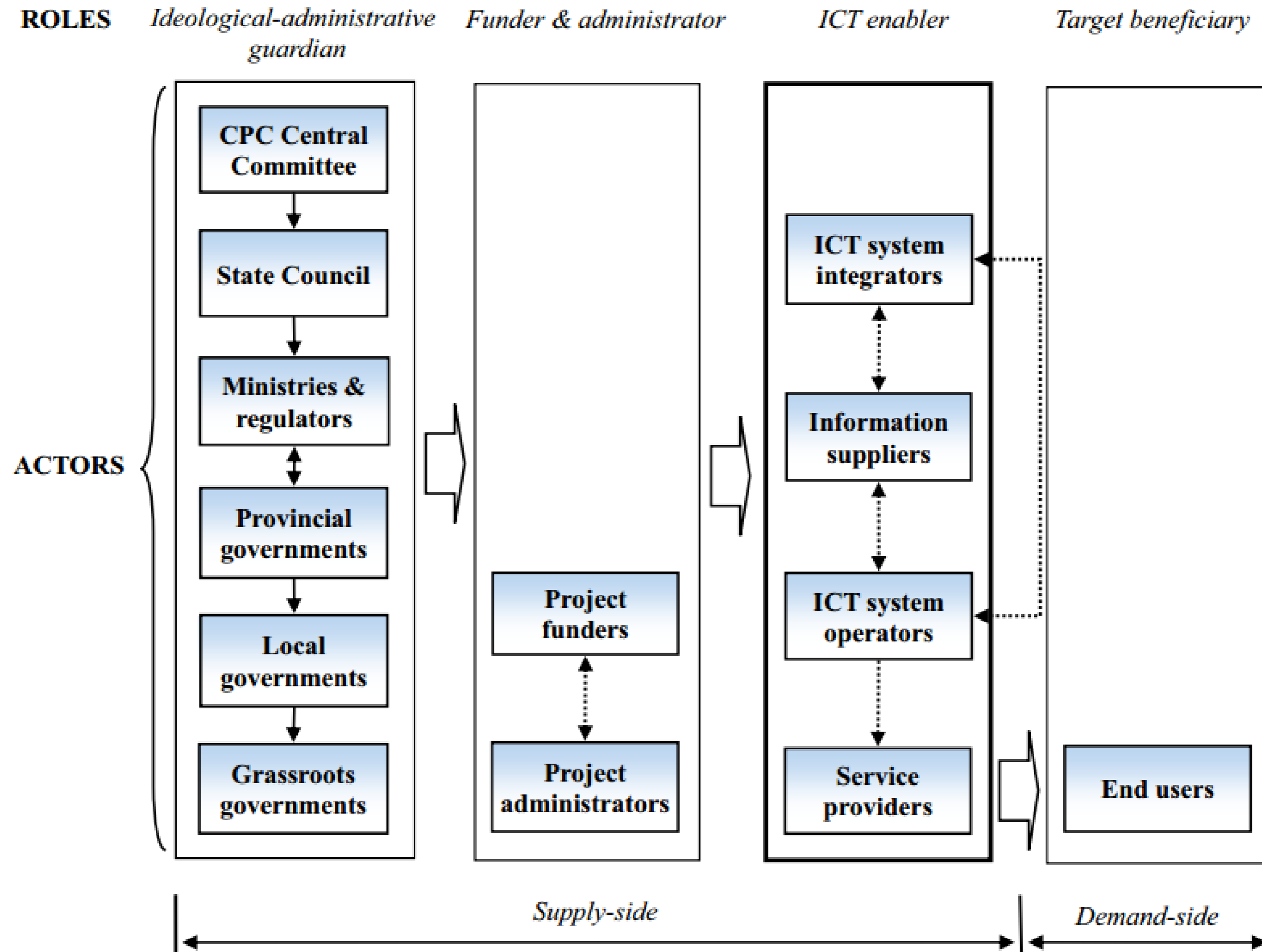
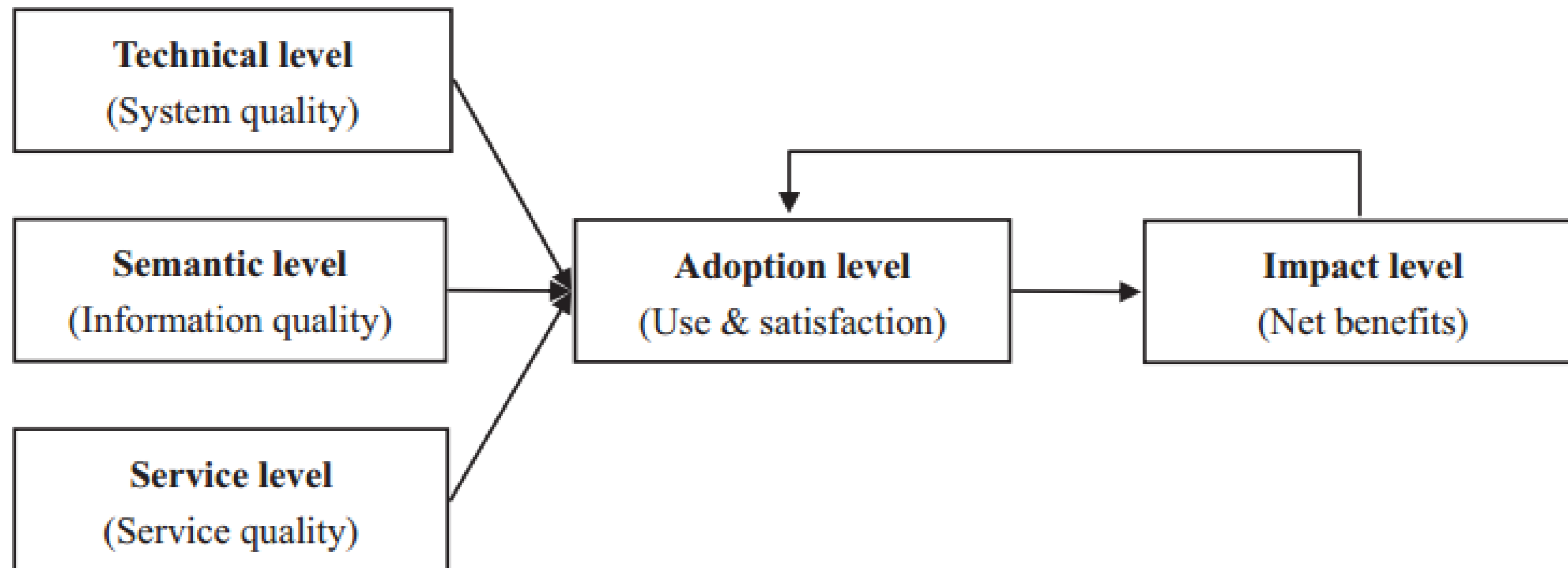# 2. Overview of the Universal Service in China

Universal Service in China

- Universal service policy, or, in the Chinese case, rural informatization policy, is a multiple-dimensional scholarly subject **which is linked to efficiency, equality, development, and growth**.

- The government in China has been trying to integrate "access" and "applications" into a single conception, if not yet an integrated regulatory platform—i.e., **the Village Informatization Program (VIP).** The VIP conception transcends various government departments such as: the Ministry of Industry and Information Technology (MIIT), the Ministry of Agriculture (MOA), the Ministry of Science and Technology (MOST), and the Ministry of Finance (MOF), among others

China's rural informatization ecosystem

# Implementation success for rural informatization programs

Universal Service in China

➢ China's Universal service policy is meant to be a national initiative intended to "informatize" rural communities and their members by:

① Improving rural "access" to information and communication technology (ICT) infrastructures, including telephone, television, and the Internet;

② Providing "applications" of so-called "comprehensive information services" (CIS), including those information services that are related to production, commerce, and daily life in rural China.

3. China's approach to bridging the Digital Divide with the Universal Service

Behavioral pattern underpinning China's universal service
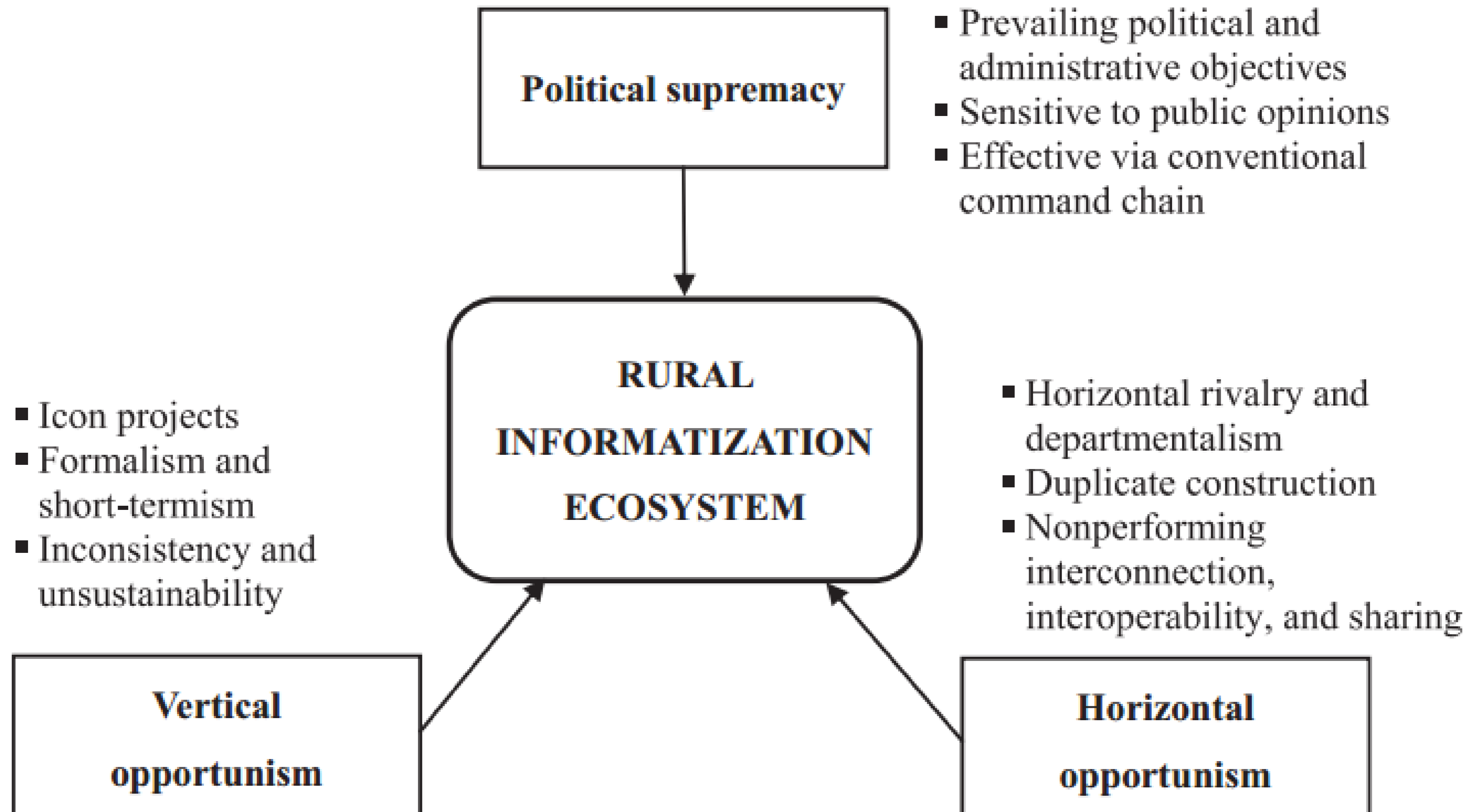
Specific measures of China's Universal Service

1. **Seeking financial subsidies and strengthening financial management**
   Promote the establishment of a scientific universal service cost compensation mechanism, and further strive to expand the scope of funding projects.

2. **Deployment and construction tasks, improve the multi-batch telecommunications universal service system**
   Since the end of 2015, the Ministry of Industry and Information Technology, together with the Ministry of Finance, has organized and implemented nine batches of universal telecom services.

Specific measures of China's Universal Service

3. **Provide subsidy funds to encourage enterprises to increase investment**

4. **Improve public services and strengthen infrastructure**
   In the eighth batch of telecom universal service construction in 2022, China Unicom will provide network coverage to administrative villages in areas with clear 5G application needs for production, tourism, e-commerce, education and medical care.

5. **Promote the empowerment of new technologies and expand the content of support**
   5G will be included in the scope of universal telecom service support, and the scope of support will be gradually expanded. At the same time, increase support for key rural revitalization counties and other areas, support forest farms, ranches and other production areas, and expand network coverage in populated areas with large populations.

4. Recommendations

Availability

➢ **Taking the initiative to seize the commanding heights of the "digital revolution" and actively lead the global "digital revolution"**

- First, technology empowerment, and continued strengthening of new infrastructure construction in rural areas.

- Second, tamp the terminal equipment.

➢ **Multi-subject construction of urban and rural digital infrastructure**

- First, we need to mobilize resources through multiple channels to consolidate the foundation for digital development.

- Second, improve content supply.

Affordability

➢ **Improve policy support and security mechanisms, take multiple measures to increase investment in weak links in digital literacy and skills, and improve long-term mechanisms to support the improvement of digital literacy and skills.**

• First, we need to improve the supporting mechanism for digital technologies to promote development.

• Second, we should accelerate the establishment of a digital skills cultivation system that covers both urban and rural areas.

➢ **We should vigorously narrow the internal "digital divide" and create "digital dividends" for the vulnerable groups in the Internet of Things.**

• First, we need to innovate the universal Internet service mechanism, support broadband development in rural and remote areas, and narrow the "digital divide" between urban and rural areas.

• Second, take advantage of "digital opportunities" to promote "targeted poverty alleviation" and create "digital dividends" for the poor.

Well Used

➢ **We should focus on improving the digital capabilities of citizens, especially the disadvantaged groups.**

• First, accelerate the construction of a digital skills cultivation system covering both urban and rural areas.

• Second, coordinate to enhance the digital skills of all residents in urban and rural areas.

➢ **To cultivate efficient and professional talents for the management of universal service in the communication industry and enhance the digital skills of all urban and rural residents.**

• First, attract enough professionals to put forward rationalized proposals about the management of universal service fund in the communication industry and establish an institution specialized in managing universal service.

• Second, establish a modern regulatory system for universal service in the communication industry.

Guarantee

➢ First, the organization and leadership mechanism.

➢ Second, explore mechanisms for innovation.

➢ Third, the assessment and evaluation mechanism.

➢ Fourth, the publicity and promotion mechanism.

THANKS

Yan Chen