



# Review and Prospect of Farmers' Entrepreneurship Research under the Background of Digitalization

Ting Zhang<sup>1</sup>, Jianchun Yang<sup>2</sup>, Zhijun Yang\*

<sup>1</sup>Guizhou University of Finance and Economics

<sup>2</sup>Guizhou University of Finance and Economics

\*Guizhou University of Finance and Economics

email: 2814781776@qq.com;

email: 772957289@qq.com;

email:1964641512@qq.com (\*Corresponding author Email)

**Abstract.** With the advent of the digital economy era, digital shows unlimited development potential and power in all walks of life, and it also brings new opportunities and challenges to farmers' entrepreneurship. Based on a systematic review of relevant domestic literature, this paper reviews the research status of farmers' entrepreneurship under the digital background, sorts out the existing research framework, in order to further enrich the research of farmers' entrepreneurship.

**Keywords:** Farmers' entrepreneurship, digital background, review of research.

## 1 Introduction

As one of the entrepreneurs in China, farmers' entrepreneurship can not only fully tap and utilize the rich natural resources in rural areas, but also skillfully introduce human, technical and capital resources from cities into rural areas, which is an effective measure to help rural revitalization. Since China put forward the strategy of digital China in the report of the 19th National Congress of the Communist Party of China, digital has widely penetrated into rural areas. Using digital to empower rural high-quality development has become an important way to help rural revitalization, and it has also provided a solid technical support and a brand-new research perspective for farmers' entrepreneurship. Based on the keyword search of China HowNet, it is found that scholars have actively discussed the problem of farmers' entrepreneurship under the background of digitalization. However, in general, the research on farmers' digital entrepreneurship is still in the initial stage, and the research topics are scattered, lacking systematic framework. Therefore, this paper attempts to clarify the related issues of farmers' entrepreneurship under the digital background and sort out the research framework by systematically combing and reviewing the relevant domestic literature, so as to further enrich the issues of farmers' entrepreneurship under the

digital background and improve the related research in the field of farmers' entrepreneurship.

## 2 The related concepts of farmers' entrepreneurship under the background of digitalization

### 2.1 Definition of Farmers' Entrepreneurship

This paper divides it based on the perspective of entrepreneurial process and entrepreneurial results, as shown in Table 1:

**Table 1.** CLASSIFICATION OF FARMERS' ENTREPRENEURSHIP CONCEPTS (Table Credit: Original)

Category	Definition	Representative figures
Process perspective	Farmers' entrepreneurship is a value creation process in which farmers identify, develop and utilize entrepreneurial opportunities and provide new products or services through the creation of new organizations;	Jianyong Jiang, 2014
	Farmers' entrepreneurship refers to the activity process in which farmers with entrepreneurial will engage in self-employment or set up private enterprises to bring benefits to themselves and create value for the society;	Xin Lu, 2020
Result perspective	Farmers' entrepreneurship refers to commercial activities with the main purpose of seeking development opportunities and increasing wealth through the organization of urban and rural resources, relying on families;	Jifei Wei, 2010
	Farmers' entrepreneurship means that farmers invest in the means of production, create new undertakings and expand their original undertakings in order to increase family income and seek career development.	Jianwei Yin, 2012

### 2.2 Definition and characteristics of farmers' entrepreneurship under the background of digitalization

Based on the existing research, this paper defines farmers' digital entrepreneurship as: farmers use digital technology to obtain information, identify entrepreneurial opportunities, integrate existing resources, and build new organizations or engage in new production activities online or offline to create economic value and social value. Farmers' entrepreneurship under the background of digitalization has the following signs:

First, farmers' entrepreneurial costs are reduced. The high start-up capital has always been a big problem for farmers' entrepreneurs. Digital background is conducive to improving farmers' entrepreneurial environment and reducing farmers' entrepreneurial costs. For example, entrepreneurs can sell products through digital platforms, and use web pages and websites for publicity and promotion, thus reducing the cost of site rental and publicity. At the same time, advanced electronic equipment can improve work efficiency, reduce human input and save the cost of recruiting employees.

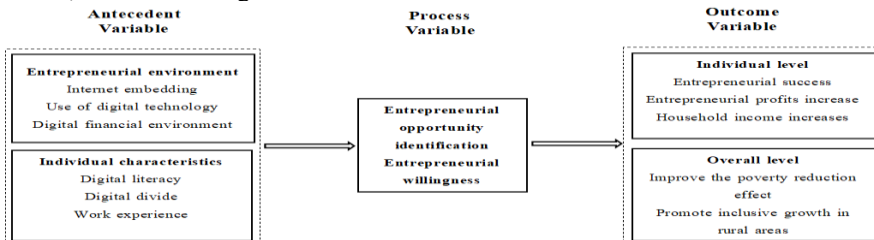
Second, the channels for obtaining resources have been broadened. In rural areas with relatively closed entrepreneurial environment, the lack of resources is the key factor that affects farmers' entrepreneurial willingness and entrepreneurial performance. The popularity of mobile phones, computers and other digital devices has increased farmers' access to resources and enriched the reserve of entrepreneurial resources. At the same time, the use of the Internet is conducive to wooing marginalized farmers to the information center, helping them to get more information about products, consumers and competitors, and information is an indispensable and important resource under the background of digitalization.

Third, capital raising methods have increased. It is the basis for the implementation of capital entrepreneurship activities, and without financial support, any activity will be difficult. Under the digital background, farmers' entrepreneurs can not only get special subsidies provided by the government, but also rely on various digital financial platforms developed and strengthened through the Internet. In addition, the openness of the Internet enables farmers entrepreneurs to publish and publicize their products on the online platform, attract more professional investment institutions or scattered investors, and obtain diversified fund-raising channels.

### 3 Research status of farmers' entrepreneurship under the background of digitalization

#### 3.1 Research framework

According to the research sequence of antecedent-process-result, the framework is combed, as shown in Figure 1:



**Fig. 1.** The framework of farmers' entrepreneurship research under the background of digitalization (Photo Credit: Original)

#### 3.2 The antecedent variables of farmers' entrepreneurship

##### 3.2.1 Entrepreneurial environment.

First, Embedded in the internet. Under the background of the Internet, the rural e-commerce entrepreneurship mode supported by Internet technology lowers the threshold of farmers' entrepreneurship, and has the characteristics of low entrepreneurial cost and simple operation. It promotes farmers' entrepreneurial passion and participation enthusiasm, realizes the organic combination of "internet plus farmers'

entrepreneurship", and opens up a new mode and path for farmers' entrepreneurship. At the same time, with the deep embedding of the Internet in rural areas, the digital platform represented by Taobao has changed farmers' production and sales methods. Internet technology has also broadened the channels for farmers to obtain capital, resources and information, which is an important means to stimulate farmers' entrepreneurial vitality.

Second, the digital financial environment. Under the background of digitalization, the integration of digital technology and finance provides a new perspective to solve the financial constraints of farmers' entrepreneurs. Digital inclusive finance has broken through the limitation of time and space, and has the characteristics of high service efficiency, wide coverage and low use cost, which lowers the threshold of farmers' entrepreneurship. On the one hand, digital inclusive finance makes use of the advancement and popularity of digital technology, which is conducive to building a sound rural credit system, meeting the capital needs of rural entrepreneurs and improving rural entrepreneurial vitality; On the other hand, digital finance increases farmers' financing channels, builds convenient online transactions, improves farmers' credit system, and can directly promote farmers' entrepreneurial behavior.

### **3.2.2 Individual characteristics.**

First, Farmers' digital literacy. Digital literacy is the basic skill and ability that citizens need to live in the digital society in the 21st century. Ying Liu et al. found that digital literacy increases farmers' ability, confidence and entrepreneurial channels, which is an important factor to promote farmers' entrepreneurial behavior <sup>[1]</sup>. Xiaojing Li et al. pointed out that the higher the digital literacy, the more effectively farmers can use digital technology to enrich their knowledge reserves and build a broad network of relationships, thus helping them identify favorable entrepreneurial opportunities, integrate diversified resource channels, reduce entrepreneurial risks and costs, and implement entrepreneurial behavior <sup>[2]</sup>. On the contrary, "digital divide" is one of the factors that hinder farmers' entrepreneurial behavior.

Second, farmers' working experience. Compared with the farmers who stay in the village, the farmers who go out to work have more abundant venture capital, rich industry experience and broad social network, so they are more likely to carry out entrepreneurial activities and achieve entrepreneurial success. Existing studies have found that: on the one hand, the experience of going out to work improves farmers' entrepreneurial behavior through entrepreneurial motivation and venture capital, and there are differences in industry heterogeneity. On the other hand, the embedding and popularization of the Internet in rural areas is conducive to increasing farmers' ability to obtain information and identify opportunities. At the same time, the use of digital devices such as QQ, WeChat and Weibo has played an important role in broadening farmers' online social networks, connecting and consolidating their offline networks, and has formed a substitution effect with the experience of going out to work.

### **3.3 Process variables of farmers' entrepreneurship**

#### **3.3.1 Entrepreneurial opportunity identification.**

As the starting point of opportunity entrepreneurship, it has always been the key to restrict farmers' entrepreneurship. Under the background of digitalization, mobile Internet has built a bridge between rural areas and the outside world, which not only strengthens the social ties between farmers, relatives and friends, but also consolidates the strong relationship network, and extends the social ties of farmers, building a weak relationship network with a wide coverage, which has become an important factor to improve the identification of farmers' entrepreneurial opportunities. Zhuang Jincai and Li Dan pointed out that the popularization of rural digital technology and farmers' use of digital components have broadened farmers' access to information, capital and technology, enriched farmers' entrepreneurial knowledge and ability, and further improved farmers' development and identification of entrepreneurial opportunities<sup>[3]</sup>. Xiong and Dong pointed out that digital finance not only expanded farmers' financing scale, but also improved farmers' ability to identify entrepreneurial opportunities, and was an important way to stimulate farmers' entrepreneurial vitality<sup>[4]</sup>.

#### **3.3.2 Entrepreneurial willingness.**

Farmers' entrepreneurial willingness is influenced by many factors such as policy environment, infrastructure and entrepreneurial resources. With the support and guidance of the digital village strategy, the pace of rural digital transformation has been accelerated, and the digital infrastructure has been gradually improved, which has changed the poor, closed and backward rural situation in the past, provided convenience for farmers to collect information, raise capital, obtain resources and identify opportunities, completely changed farmers' life, production environment and conditions, and inspired farmers' entrepreneurial willingness<sup>[5]</sup>. Zhou pointed out that due to the wide-ranging embedding of rural Internet, Internet technology has improved farmers' market information, access to entrepreneurial resources and social capital<sup>[6]</sup>.

### **3.4 Outcome variables of farmers' entrepreneurship**

#### **3.4.1 Individual level.**

At the individual level, it mainly shows the impact of entrepreneurial activities on entrepreneurs' individuals or families, including entrepreneurial success, improvement of entrepreneurial profits, increase of family income and other general entrepreneurial performance. With the gradual popularization of rural Internet, firstly, a new online+offline business model has been built, which has improved the entrepreneurial performance of farmers; Secondly, the use of digital devices such as computers and mobile phones has stimulated farmers' entrepreneurial passion and brought more objective entrepreneurial profits to farmers. Finally, the digital village strategy promotes the development of rural digital industry and the construction of digital system, showing unprecedented vitality in the process of increasing farmers' income and playing an important role in increasing farmers' income.

### 3.4.2 Overall level.

Farmers' entrepreneurial activities play an important role in creating jobs, internalizing rural surplus labor, stimulating rural economic development and helping rural revitalization. Under the background of digitalization, first of all, the improvement of digital literacy has become the key for farmers to obtain the dividends of digital economy development, which has reduced farmers' relative poverty and brought into play the poverty reduction effect [7]. Secondly, e-commerce provides diversified channels for the promotion and sales of agricultural products, and has made important contributions in the process of reducing poverty, suppressing the return to poverty and helping rural revitalization<sup>[8]</sup>; Finally, the inclusive effect of digital finance can effectively stimulate farmers' entrepreneurial vitality, is the key to lowering the threshold of financial services and narrowing the income gap between urban and rural areas, and has a significant impact on promoting inclusive growth in rural areas.

## 4 Conclusions

Under the background of digital economy, digitalization has greatly improved farmers' entrepreneurial environment, improved farmers' entrepreneurial support system, and made farmers' entrepreneurship show unprecedented vitality. It is an effective measure to improve farmers' entrepreneurial willingness, promote farmers' entrepreneurial success, stimulate rural economy and help rural revitalization.

## Founding

National University Students Innovation and Entrepreneurship Practice Project, Huaxi University City Express Packaging Intelligent Recycling Platform, No.: 202110671013S.

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