

# Research on Business Model Construction and Innovation of Smartphone Training for Farmers in Rural Areas

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## ABSTRACT

In terms of smartphone training for farmers, the model of “Government-Matchmaking and Enterprise Training” has achieved a series of results, but there are also many problems such as short training period, limited training scope and few training personnel. In this case, the idea of connecting college volunteers with national smartphone training for farmers is put forward, which is a beneficial discussion and innovative extension of the current training mode. Firstly, this paper expounds and analyzes the status quo of smartphone training for farmers and summarizes the existing literature. Then business canvas theory is used to depict the new business model of docking online and offline trainings, which includes three specific modes, “farmers + online knowledge point learning platform”, “college volunteers + farmers” offline teaching, “college volunteers + online volunteer docking platform” and their implementation paths. And the innovation and advantages of this business model are analysed in order to provide a new reference for the country's smartphone training for farmers.

**Keywords:** *College volunteers, farmers, smartphone training, business canvas theory, business model*

## 1. INTRODUCTION AND LITERATURE REVIEW

With the development of society, mobile phone access to the Internet has been the major way for farmers. The quality of surfing the Internet has also been a vital index when assessing people's standard of living.

To help the villagers keep pace with the development of the information society and push forward the agricultural and rural informatization process, the Ministry of Agriculture introduced The Notification from the Ministry of Agriculture on the Development Mobile Phone Application Skills Training for Farmers to Improve Their Informatization Capacity in October 2015. The following June, the Ministry of Agriculture organized the start-up of mobile phone application skills training. And at the end of December, it published The Notification from General Office of the Ministry of Agriculture on jointly Promoting the Process of Mobile Phone Application Skills Training for Farmers with Related Entities, in which a list of 15 enterprises (including China Telecom, China Mobile and China Unicom) who promised to promote the mobile phone training was announced. After early preparation and exploration, In March 2017, July 2018 and August 2019, the Ministry of Agriculture held the launch ceremony for the training, and published the overview and summary in Journal of Agriculture Engineering Technology. Over the past three years, a total of 30 million people have been trained [1].

### 1.1. Overview of the “Government-Matchmaking and Enterprise-Training” Mode

Current mobile phone training mode is to set up the stage to let enterprises provide trainings, which is mainly aimed at farmers and key agricultural technicians at the grassroots level. The training methods may slightly differ in different provinces, but all of them can be roughly boiled down to the combination of online and offline. Online trainings mainly carry on the informatization instructions for the farmers by satellite broadcast, Learn Smartphone Operations and the cloud Intelligent farmers apps and WeChat group, while offline trainings, based on local training requirements and Mobile Phone Application Manual for farmers published by the Ministry of Agriculture, mobilize the Information Agency and relative enterprises to conduct publicity and trainings on site, which instruct them to learn about the functions of the smartphone, how to download apps and operate them. During this period, many enterprises hosted their special activities. For example, Millet make an introduction about the tips for shopping a cellphone and Beneficial Information for Farmers app to help the farmers learn the policies about agriculture and countryside as well as the market quotation; In certain towns and villages in Henan, China Unicom's controlling member company, Yi Long loan company, provided advisory services for farmers on how to transfer and pay the phone bill with their smartphones.

### **1.2. The Deficiencies in the Application Skills Training for Farmers**

The nationwide trainings have achieved corresponding results, but there also exist certain problems. For instance, in Shandong, the trainings took a long time and cost too much, in contrast to the lack of special funding, the shortage of trainers and incomplete incentive and assessment mechanism [2].

In Jiangxi, there were few household trainings and insufficient training coverage. Besides, the training content seemed to have limited effectiveness because they couldn't fully meet the trainees' requirements and solve their questions in time after the trainings[3]; In Hebei, the trainings lacked a long-term consolidation mechanism to assist middle-aged and elderly(who are more likely to forget the steps after the training) review repeatedly[4].

To sum up, there are certain drawbacks in current training mode. The following four aspects can make a summary about it:

- Single means of training and insufficient coverage due to few household trainings;
- Slow progress because of the shortage of trainers;
- Low enthusiasm to attend the trainings because of little autonomy in choosing training time for farmers;
- Lack of flexible and timely feedback channels based on numerous questions.

### **1.3. Overview of Related Literature of Smartphone Training for Farmers**

In this regard, quite a few experts and scholars studied the smartphone training model, the status quo of smartphone training for farmers, countermeasures, and motivation of voluntary services in colleges and universities from multiple perspectives. For example, Li put forward three innovative forms of smartphone training for farmers in Beijing[5], Wang thought about the training of mobile phone applications for farmers, and pointed out that requirement surveys are necessary before conducting smartphone training to carry out targeted training according to the characteristics of farmer[6]; Wu proposed four ways to train farmers on mobile phone applications in the 'Internet + 'era: establishing training institutions, training backbones, optimizing training methods, and strengthening government leadership[7]; Chen studied the behaviours on migrant workers' use of smartphone and their impact factors, and it is concluded that the use of smartphones by migrant workers is based on five aspects such as information interaction and emotional communication[8]; Studies on the design of new educational software for farmers based on Android smartphones has been conducted by Guo and Li[9]; Zhang proposed that the training should be organized by the government's unified leadership, specific responsibility of the agricultural sector, the coordination of relevant

departments, and the extensive participation of farmers[10]; Huang and Wang et al. investigate the capabilities of college students to revitalize rural voluntary service from the perspective of volunteers. The research has put forward the upgrade approaches to the competence of voluntary service of the college students from five major aspects including talent selection, management system, incentive mechanism and so on[11]; Zhang, Zhu studied the internal and external factors which affect college students' volunteering services[12]; Zhang and Wang researched into volunteering services about the model of college students' willingness to participate in as well as about the incentive mechanism[13].

To sum up, the current researches on the country's smartphone training for farmers is still wanting. The existing researches tend to carry out on-site publicity records, the design of vocational skills training platforms based on mobile APPs and WeChat public accounts, and the motivation of volunteers to revitalize rural services. Whereas the analysis of how to make use of college volunteers and dock the two is particularly lacking, so this paper builds a new model of 'college volunteers + smartphone training in rural areas' on the basis of the national smartphone training strategy, with a view to providing assistance for further development of smartphone training for farmers.

## **2. CONSTRUCTS AND ANALYSIS OF 'COLLEGE VOLUNTEERS + SMARTPHONE TRAINING FOR FARMERS' BUSINESS MODEL**

The business model canvas theory provides a theoretical basis and methods for business model construction and analysis. It is a tool for analyzing business models proposed by Alexander Osterwalder and Yves Pigneur. The business model is visualized and divided into nine based on the business model concept definition Tectonic plates, namely customer segmentation (CS), value proposition (VP), channel (CH), customer relationship (CR), revenue source (RS), key resources (KR), main activities (KA), key partners (KP) and cost structure (CS); business model canvas analysis starts with customer segmentation. After identifying target customers, companies need to define a value proposition and pass it to customers through corresponding channels, and establish a relationship with customers to bring in revenue streams. In addition, it is necessary to identify the key resources of the enterprise and what activities are provided to customers, which key partners are required for these activities, and finally what are the costs of completing these key activities [14]. This article describes the business model of 'College Volunteers + Smartphone Training for Farmers' based on the business model canvas theory, as shown in Figure 1.

<b>Key Partners</b> 1.government 2.university 3.university volunteers	<b>Key Business</b> 1.research on famers' demand for smartphone 2.develop online platform 3.mobilize college volunteers	<b>Value Proposition</b> 1.integrate the resource to solve the smartphone using difficulties of farmers 2.Online Q&A 3.Offline voluntary service	<b>Customer Relationship</b> 1.knowledge contest for famers 2.keynote speech for college volunteers	<b>Customer Segmentation</b> 1.farmer:grassroot farmers and agricultural farmers 2.college volunteers:agriculture related majors or not
	<b>Key Resource</b> 1.data on college volunteers 2.data on farmers		<b>Channel</b> 1.Mobile APP、 WeChat mini program、 wechat public account 2.offline volunteer service	
<b>Cost Structure</b> 1.labor costs 2.system development、 operation and maintenance costs 3.equipment cost			<b>Revenue Source</b> 1.Pubilc welfare	

**Figure 1** "College Volunteers + Smartphone Training for Farmers" Business Model Based on the Canvas Model

## 2.1. Analysis of "College Volunteers + Smartphone Training for Farmers" Business Model Based on the Canvas Model

### 2.1.1. Customer segmentation

From the country's training on farmers' smartphone applications, it can be known that the current groups that still have difficulty using smartphones are represented by middle-aged and elderly groups, and the training objects can be divided into the broad grassroots and new agricultural technicians, of which ordinary The grassroots farmers take the basic use of smartphones as the training goal, and new agricultural technicians strengthen their understanding of agricultural technology and national policies. The customer group of this business model is mainly targeted at middle-aged and elderly farmers at the grassroots level who have difficulties in basic operation and use of smartphones. This group has the largest number of smartphones, which does not require high use of smartphones, and has a stronger life and entertainment. The training scale is larger and the training time is longer. At this point, college volunteers have complementary numbers and time advantages. As an important part of this business model, college volunteers can also be called customers. Farmers are the main service group. College volunteers are the cooperative service group. Due to the differences in farmers' needs and the professional knowledge of college volunteers, college volunteers can be classified into two categories, one is the basic knowledge teaching specialty not related to agriculture, and the other is the agricultural technology knowledge teaching specialty closely related to agriculture.

### 2.1.2. Value proposition

Improving farmers' mobile phone application skills, improving farmers' use of smartphones to increase their ability to get rich, and accelerating the construction of rural information technology are the concepts of national farmers' mobile phone application skills training. This

business model aims to build a volunteer team for colleges and universities and publicize farmers' smartphone training. It aims to add new training methods to existing training models through new channels of college volunteer services, and establish a long-term mechanism for volunteer services. Online and offline docking services solve the problems of grassroots farmers' operation of smartphones in a timely manner.

### 2.1.3. Channel

The business model of 'College Volunteers + Smartphone Training for farmers' adopts a combination of online and offline methods to help farmers solve their mobile phone using problems. The offline matchmaking service for college volunteers helps farmers master the use of smartphones through patient one-on-one patient guidance. At the same time of offline one-on-one teaching, it is also necessary to take into account the drainage to the online platform. The online platform is a consolidated platform that integrates basic knowledge teaching and questioning, including mobile APP, WeChat public account, WeChat mini program, etc.

### 2.1.4. Customer relationship

Maintaining a good customer relationship is the prerequisite for forming a long-term docking mechanism. For famers who are trained, organizing knowledge contests and award-winning contests online and offline can be used to improve their initiative and enthusiasm. And for college volunteers, the ways of Volunteer Honor Certification, Volunteer Working Hour Certification, and Material Reward, etc. and organizing volunteer keynote speeches can be applied to create an atmosphere of volunteer service.

### 2.1.5. Revenue source

As a public welfare volunteer service, it is not for profit, but there are many potential ways to increase revenue sources, such as using a large customer base to launch

online APP advertising and developing fee-based courses for new agricultural technicians.

2.1.6. Key resource

The core resources of this business model are roughly divided into three parts: national policy document support, college volunteer service programs, and college volunteers; the important prerequisite for promoting volunteer docking services for college volunteers is that the state has promulgated relevant college volunteers to connect farmers with mobile phone skills training. Guidance and opinions, first to lay the foundation for policy services; secondly, colleges and universities should actively respond to national policy calls, formulate relevant volunteer service plans and incentive measures, and formulate scientific, reasonable and effective volunteer service docking based on full investigation and research on volunteer service motivations Mechanism, make full use of the geographical advantage of the large number of volunteers in universities and widely distributed, to contribute to farmers' mobile phone application skills training.

2.1.7. Key business

The key to the business is to do a good job of farmers' needs research and volunteer launch, and to solve the problem of balance between demand and supply. Before launching mobile phone skills training for farmers, you need to understand the farmers' needs, understand the focus and the main pain points of mobile phone use, and make full preparations for targeted mobile phone skills training for farmers. After college volunteers understand

the farmers' needs, they need to carry out the necessary preparations to facilitate timely docking work in colleges and universities. The online volunteer service platform includes mobile phone APP, WeChat public account and WeChat mini program. The development of the online platform is the guarantee for farmers to learn and consolidate. It is the key to ask questions through the online platform and match the appropriate college volunteers through the matching mechanism. Therefore, the development of a complete online platform and the design of matching mechanisms are also keys to this business.

2.1.8. Key partners

The development of this business model requires the support of local governments and relies on the two core subjects: universities and college volunteers. College volunteers are an integral part of the partnership. Without them, this business model cannot run smoothly.

2.1.9. Cost structure

Human costs, system development and maintenance costs, and service equipment and facility costs together constitute the cost of this business model. Among them, human costs mainly include college volunteer transportation fees and material incentive subsidies. System development and maintenance costs are mainly mobile APP development, WeChat public account operation and WeChat mini-program development and maintenance costs. In addition, the purchase or leasing of related venues and service facilities during the event organization process also requires cost.

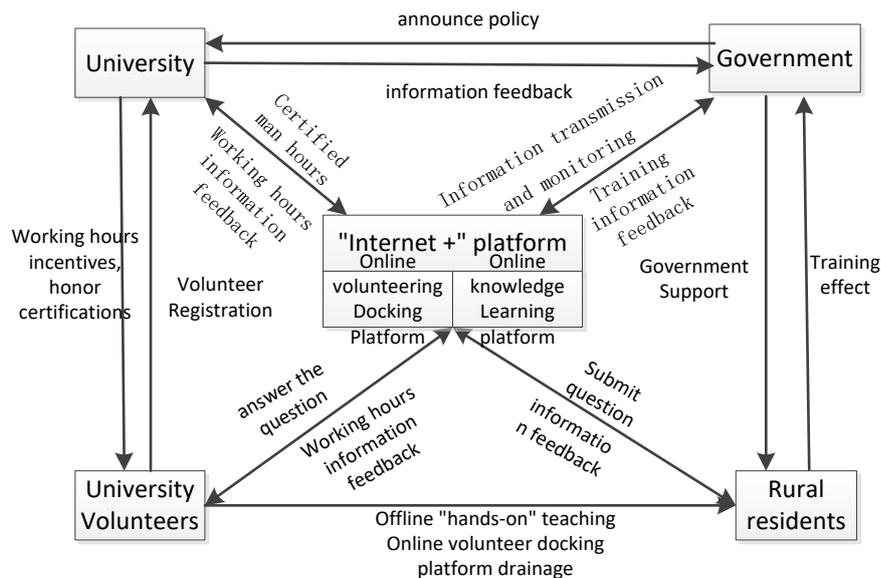


Figure 2 The membership of the business model 'College Volunteers + Smartphone Training in Rural areas'

## **2.2. Analysis of the Membership of the Business Model 'College Volunteers + Smartphone Training in Rural Areas'**

Government, farmers, universities and college volunteers are key members in this model, in which government organizations and universities are respectively responsible for issuing relative policies and taking measures to connect volunteers with smartphone training for farmers; Whereas college students and farmers are the main body. College students and farmers are at opposite ends of supply and demand. In practical terms, farmers provide their requirement information and feedback for the smartphone trainings, and college students offer manpower for the docking of the trainings. In addition, there are also three specific training models, as shown in Figure 2.

Knowledge consolidation and recourse: 'Farmers + Online Learning platform'

Offline hands-on teaching: 'College Volunteers + Farmers'

Online FAQ: 'College Volunteers + Online Volunteer Docking Platform'

**2.3. Research On The Realization Path Of 'College Volunteers + Rural Smartphone Training' Business Model**  
The business model of 'College Volunteers + Smartphone Training for farmers' adopts a combination of online and offline methods to help farmers solve problems while using the smartphones. The necessary work carried out by the volunteers' offline docking service is to liaise with the relevant community neighborhood committees or village committees, prepare the lecture content in advance, and help farmers with smartphone operation through one-on-one patient guidance on the ground. In addition, teaching farmers to learn to use the voluntary service docking platform is the core of the early work. On the one hand, offline knowledge docking can only help farmers have a small initial understanding of smartphone, and continuous docking services in the later can really equip them with in-depth skills. Therefore, the drainage to online platforms are supposed to be taken into account during offline one-on-one teaching. The current emphasis of smartphone training is to solve the problems of residents in the process of using smartphones, and to help them improve their sense of acquisition and achievement by finding and solving problems. It is true that offline teaching is far from enough. A consolidated platform that integrates basic knowledge teaching and questioning online is a must. Hence, this business model is concretely realized through the following three paths.

### **2.3.1. 'Farmers + online volunteer docking platform' knowledge consolidation and teaching help**

The online volunteering docking platform not only includes courses on the basic operation of mobile phone

use, but also incorporates the function of raising questions online. The specific implementation should consider the following four aspects.

(1) Customized user interface design. The majority of rural smartphone trainees are middle-aged and elderly residents, so the development and design of online platforms must take into account the using habits of this group. Based on sufficient research, we can develop a user-friendly interface for them, such as large font display, relatively bright colors, appropriate icons, etc.

(2) Enrich and improve the online teaching curriculum system. According to the different levels of farmers' mastery of smartphones, we need to develop both foundational mobile phone courses (such as the use of chat tools and online Baidu search methods) and relevant professional courses such as Taobao store operation, the interpretation of agricultural technology knowledge and national policies, etc. It's required to continuously enrich and improve the online teaching curriculum system based on the situations of offline information collection and training.

(3) Innovate online training methods. The traditional online teaching mode mainly uses graphic and video explanations. In recent years, online live courses have been prevalent, and well accepted by online students for their favourable interactive feedback and downloadable offline viewing. In the same way, the online training mode for smartphones should not be limited to traditional video teaching and graphic reading, but also be innovative in terms of training methods and training duration.

(4) One-click online help, real-time posts of questions. Multiple problems and various forms are major features during the prophase and metaphase of using the smartphone. No access to get timely guidance when encountered problems of smartphone use gives rise to universally poor using experience and negative learning mindset. The one-click help function helps farmers publish questions which will be resolved through the platform in real time in the process of their use through graphics, text or voice.

### **2.3.2. 'College volunteers + farmers' offline hands-on teaching**

Offline teaching of volunteers in colleges and universities should be based on the voluntary organization of government organizations and the questions raised by farmers on the voluntary docking platform to solve the problems of farmers in a targeted manner. Among them, relevant national government organizations should provide corresponding policies and site support, as well as taking relevant incentive measures to further encourage volunteers' service behaviours; college volunteers should also constantly improve their quality and provide better voluntary services. The specific implementation is shown in the following four points.

(1) Promulgate relevant policies to promote tripartite cooperation among local governments, university

organizations and farmers. Like the current 'Government Bridge-Enterprise Training' approach, the support of national policies and the tripartite cooperation of local governments, college organizations and farmers are indispensable to long-term voluntary docking services. National policies and local government agencies provide convenient services including training information publicity, gathering farmers, and providing training venues for offline voluntary docking services.

(2) Improve training content and methods. Before launching offline volunteer training docking, it is necessary to fully prepare and improve the training content, collect targeted public opinions and carry out training docking services based on local actual conditions. For example, some farmers are relatively lacking in basic knowledge of smartphones, and some farmers are more eager for agricultural technology and online marketing of products. The training needs to adapt to local conditions and introduce experts and scholars and relevant professional and technical personnel to provide them with targeted training when necessary.

(3) Improve the quality of offline training staff. The universities, which are gathering places for high-quality talents, have a large team of volunteers with different capabilities. However, there are also uneven training methods and professional levels, which may not meet the actual needs of local residents. Moreover, the basic quality of volunteer services and civilized etiquette are required to be standardized and explained in advance, which demands that certain training shall be conducted and the quality of the trainees shall be continuously improved according to post-event questions to avoid unnecessary negative effects before carrying out offline training.

(4) Appropriate funding subsidies and incentives. The smartphone training is a long-term, large-scale project that requires multi-party cooperation. From the perspective of long-term and durable volunteer docking services, certain funding subsidies and voluntary service honorary certification for volunteers will effectively strengthen enthusiasm of volunteering service.

### *2.3.3. Online questioning and answering of 'college volunteers + online volunteer docking platform'*

In response to the questions raised by farmers, the platform needs to complete the online voluntary matchmaking of the two according to a certain matching mechanism. This requires a sufficient number of college volunteers and timely and accurate answering feedback, aiming to help farmers solve their problems and increase their sense of gain and accomplishment. The details are shown in the following three points.

(1) Absorb sufficient volunteers to settle in. In response to the various problems of farmers, volunteers with diverse knowledge and skills are needed to solve them. Due to differences in regions, cultures, professional knowledge

and personal experiences, there may be multiple solutions for a question. At this time, the advantage of the number of volunteers can be played out very well. Therefore, in order to solve the questions raised by farmers in a long-lasting and timely manner, the platform needs to recruit plenty of volunteers to settle in to fully utilize the characteristics and advantages of them: a large number, wide distribution, and checking mobile phone frequently.

(2) Perfect the platform's matching mechanism. The online voluntary docking platform should adopt a corresponding matching mechanism. Once the farmers ask related questions, the platform will preferentially match the appropriate question answerers for them according to the age of the farmers, the level of operation mastery, geographical location and categories of problems; By setting the corresponding matching mechanism and continuously improving according to the feedbacks, a feasible matching mechanism is to be created.

(3) Strengthen the supervision and control towards the platform. The online volunteering docking platform should provide certain identity verification for the college volunteers and farmers who settle in, and adopt a real-name system to enhance the security of the platform while avoiding irrelevant commercial propaganda by lawbreakers and advertising agencies.

## **3. INNOVATION ANALYSIS OF 'COLLEGE VOLUNTEERS + SMARTPHONE TRAINING FOR FARMERS' BUSINESS MODEL**

Compared with the current smartphone training model of 'government construction-Enterprise training', the 'college volunteers + rural smartphone training' model has a certain degree of expansion and innovation in training personnel, training service models and service scenarios. The concrete manifestation is shown in the following three aspects, as shown in Figure 3.

### **3.1. Training Personnel Innovation**

At present, the main force of smartphone training in rural areas is mostly technicians in enterprises and relevant experts and scholars. The government matches them. Enterprises conduct a variety of content training, including basic use of mobile phone, network security education, and learning of APP operation. The 'College Volunteers + Rural Smartphone Training for Farmers' model starts from college student volunteers with the advantages of a large number wide distribution and strong mobile phone basic skills, will achieve effective docking of multi-scenarios with farmers through the online volunteer docking platform. This will undoubtedly solve the problem of inadequate training personnel and short training period of traditional training methods.

**3.2. Innovation of Diversified Service Scenarios**

The traditional smartphone training mode tends to be field promotion and centralized training, which is limited to a certain place and time period, while the 'college volunteers + smartphone training for farmers' mode can solve the problems encountered by farmers in the use of smartphones in a timely and efficient manner through offline long-term docking and online platforms. It creates a multi-scenario learning method that combines multiple online platforms such as online theory learning and training docking of APPs , WeChat public account and applet, by which traditional restrictions of venue, time and space are no longer the barriers of teaching and learning. It also takes full advantage of the wide spread of WeChat public accounts and WeChat mini-programs to realize multi-scenario learning by teaching and answering questions in mobile app, consolidating knowledge and expanding learning areas with WeChat public account.

**3.3. Innovation of Differentiated Service Model**

Solving the asymmetry problem between the demand side and the supply side to offer targeted training which is in urgent need to farmers is the top priority of current smartphone training. The training in the past focuses on a core topic supplemented by a wide range of training content, and lays emphasis on offline theoretical learning and practical operations. This will, to a certain extent, cause the fact that farmers have inconsistent progress due to different mastering situations. And it fails to customize and diversify the training content and training methods for farmers over the uniform unified training. Besides, there are very few services that provide online theoretical learning and problem solving, which requires a lot of manpower and material resources for offline guidance and online Q&A. 'College Volunteers + Smartphone Training for Farmers' accomplishes the shift from offline training

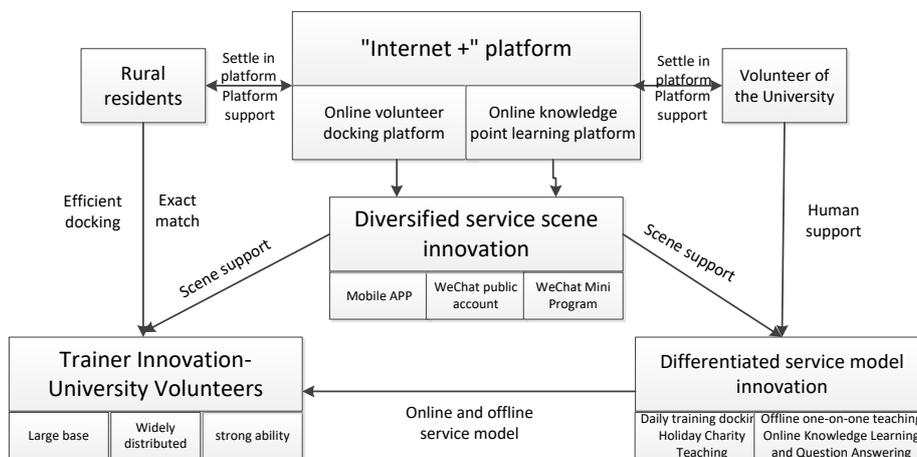
and guidance activities such as one-on-one operation courses and teaching stint during the university breaks to online 'Internet +' platform, integrating learning and questioning. The platform transfer, through the College volunteers who have already settled on the platform, helps the farmers to further solve their problems online. Such innovation will achieve a differentiated and diversified training mode.

**4. ADVANTAGE ANALYSIS OF 'COLLEGE VOLUNTEERS + SMARTPHONE TRAINING FOR FARMERS' BUSINESS MODEL**

The smartphone training for farmers carried out by the country has some shortcomings including relatively limited scale of training, short training period and the limits of training personnel; Compared with it, the business model of 'college volunteers + smartphone training for farmers' has the following advantages.

**4.1. Achievement of Training Integration Across Time and Space**

With large number, wide distribution and sufficient time, volunteers in universities are available for building a training service docking model bringing together volunteers and farmers offline and online; by virtue of good teaching effectiveness realized by offline hands-on training from college volunteers, users from rural areas can be drained to the online platform; through the online 'Internet + platform', on which the farmers post their questions and the volunteers offer solutions, a cross-temporal and cross-space integration training towards farmers can be achieved, so that the training and learning are no longer limited to fixed training time and location.



**Figure 3** 'College Volunteers + Smartphone Training for Farmers' Business Model Innovation

#### **4.2. Realize Measures Tailored to Local Conditions With 'Zero Culture Differences'**

As farmers are generally older, their transient memory is comparatively weak, coupled with cultural differences and different levels of Mandarin, so it is of vital importance to help farmers learn how to use smartphone in a simple and repetitive process of similar problems when popularizing smartphone training. Volunteers in universities are widely distributed, which can take into account local cultural differences, break down communication barriers, and help farmers grasp the use of smartphones in a more intimate and easy-to-accept communication mode.

#### **4.3. Achieve Long-term Training and Timeliness of Problem Solving**

Current national smartphone training mostly relies on offline smartphone training week activities, and there are few training methods for online questioning and problem solving. Based on the online 'Internet +' platform model, with the advantages of a large number and a wide geographical distribution of volunteers, it enhances the stickiness of farmers to the platform by means of answering a multitude of questions raised by residents in real time, and, thereby achieving long-term effectiveness of online and offline training and the timeliness of problem solving.

#### **4.4. Reduce Training Costs**

Nowadays, the country adopts the 'government bridge-enterprise cooperation training' model for smartphone training. Limited training staff, short training time, long intervals and time-consuming and labor-intensive organizations will cause relatively high training costs, which will hinder the development of smartphone training. While the method of 'College Volunteers + Smartphone Training for Farmers' can reduce the cost and expenses. On the one hand, volunteering services are non-profit, so the organization process demands relatively low overhead; on the other hand, comprehensive utilization of proficient skills and obvious professional advantages of college volunteers can greatly cut down on the recruitment costs of related professional and technical personnel. In addition, the docking on online platform can also reduce the frequency of offline field teaching, thereby cutting training costs.

#### **4.5. Create a Win-Win Situation for the Government, Volunteers and Farmers**

Through the 'College Volunteers + Smartphone Training for Farmers' model, the number of teaching staff can be quickly increased, making smartphone training a national action and effectively helping the government to speed up the progress of training. In addition, farmers can also grasp the basic functions of smartphone and related agricultural knowledge and skills through hands-on and online teaching as well as real-time question answering services; college volunteers can not only enjoy the fun of volunteering services from voluntary activities, but also get social experience, second class credits, honorary certification for voluntary services, and part-time subsidies. By means of government policies, positive response of college volunteers and docking with farmers will effectively contribute to the formation of a win-win situation for all three.

### **5. CONCLUSION**

The country's vision for smartphone training to farmers is to enrich their daily lives and to increase their income. The large number of farmers in our country, the large scale of training, limited training staff and time have hindered the current process of smartphone training to farmers to a certain extent. By constructing a new model based on 'College Volunteers + Smartphone Training for Farmers', utilizing some definite advantages of college volunteers and promoting the voluntariness and public welfare, knowledge sharing between college volunteers and farmers can be accomplished successfully. Admittedly, on basis of the fact that the 'College Volunteers + Smartphone Training for Farmers' model relies on college volunteers to a great extent, the content of the training is more inclined to basic mobile phone operation teaching, so there exists obvious shortcomings in terms of higher professionalism and subject requirements. This paper makes a detailed research on the implementation paths, innovations and advantages of this model on the basis of the *Commercial Canvas theory*. Without systematic statistics and investigations aimed at farmers and college volunteers, the data support for this model is sparse. Nevertheless, the 'College volunteers + Smartphone Training' model in rural areas is still a beneficial exploration of a new model of smartphone training for farmers, which is of great significance for accelerating the process of country's smartphone training for farmers and the construction of rural informatization capacity.

### **ACKNOWLEDGMENT**

This work was supported by Provincial Training Programs of Innovation and Entrepren

ership for Undergraduates (Grant Numbers: 201810488106) in Hu Bei, China.

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