

# Research on the Establishment, Operation and Management of "Farm Helper" APP

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## Abstract

The poverty problem in China has an important connection with the precision sales of agricultural products. We are committed to providing farmers with all-round help, taking "farmers' income increase, agricultural growth, and rural stability" as our mission, and comprehensively helping farmers develop and become rich. Therefore, our team has developed a central APP called "Agricultural Helper", which provides a safe, reliable and convenient platform for farmers to sell agricultural products. Our platform eliminates many redundant steps and directly contacts with enterprises such as fruit processing plants and canning plants. The platform also provides a personal to personal marketing model to further simplify the transportation of agricultural products and ensure the quality of agricultural products, such marketing mode can reduce the purchase cost of enterprise users and individual users. This paper introduces the main functions, products and services of the "agricultural helper" APP, analyzes its marketing strategies, and analyzes its risk types and countermeasures.

## Keywords

Agricultural Product Sales; APP; Marketing Strategy; Risk Management.

## 1. Introduction

China is a large country with agricultural foundation, and the agricultural economy is also the key to our market economy in the contemporary society, based on the market environment background of taking the agricultural economy as the whole social economic chain. Agricultural helper companies came into being. Due to the existing problems in the market, such as too simplistic sales and operation mode of agricultural products and inadequate system, the development of sales and operation technology of agricultural products needs to be further studied, and the company has a promising development space. The project aims to promote the new scale operation of agriculture, change the agricultural development mode and accelerate the modernization of agriculture on the basis of profitability.

Bengbu Agricultural Helper Co., Ltd. is a technology development company focusing on the management of agricultural business system, mainly engaged in the development of convenient ways of selling agricultural products and APP and other electronic products. It promotes the development of the new business concept of contemporary agricultural products, is committed to providing a reliable, safe and convenient platform for the sale of agricultural products,

simplifies the marketing model, and conducts research and development of related electronic products and business models to create a new market model for agricultural products.

The profit of the company mainly depends on the accumulation of customer resources in the early stage, and the subsequent marketing, so that customers can become long-term users and gain most of the benefits in the marketing. Obtain the appropriate price difference between the acquisition mode and the sale mode, as well as the income from the APP registration fee. When supplying goods to retail stores, charge appropriate packaging fees, and advertise for the cooperative enterprises when promoting the platform, making profits from the advertising fees.

## **2. Functions of the APP**

### **2.1. Acquisition Platform**

The agricultural product acquisition platform is divided into two parts: long-term cooperation and short-term cooperation. Customers who have signed long-term cooperation agreements with the platform enjoy all the discounts offered on the platform. Customers who have short-term cooperation can also obtain the discounts by participating in the activities launched on the platform. Classified by the varieties of agricultural products purchased, it can be divided into fruit and other categories. Online marketing negotiation is conducted in the form of express transportation, and offline logistics transportation is self operated.

### **2.2. Supply Platform**

The product supply is mainly for the enterprises that cooperate with our company, such as canneries, fruit processing plants, etc. The cooperation mode of our company's agricultural product supply enterprises is to sign long-term cooperation agreements. In addition, our platform also supplies goods to some retail stores, so as to export and supply products in many ways, so as to achieve maximum profits.

### **2.3. Entertainment Platform**

Set up columns containing games, videos, etc., and incorporate news elements, appropriate product advertising and other information into them, which will be updated every three days. Improve users' interest in the platform in the form of the Internet, so that the convenience of the online platform increases users' preference for our platform.

### **2.4. Communication Platform**

It is divided into three parts: acquisition partner and acquisition partner, supply partner and supply partner, and official customer service of our platform. It is provided for customers to communicate with each other, so that customers can make friends and enhance emotional communication in the process of mutual communication, and take this platform as their emotional connection center to obtain old customers. Enrich customers' emotional world.

### **2.5. Knowledge Platform**

To provide customers with some common sense of crop season change and precautions for agricultural product storage and use, so as to increase the practicability of APP and make it integrated into people's lives.

## **3. Market Analysis**

As a large agricultural country, China's farmers, agriculture and rural issues are closely related to social stability and national prosperity. At present, China's rural population is 900 million, accounting for about 70% of the total population. The agricultural population is 700 million, accounting for 50% of the industrial population. At the same time, agriculture in the new era is also a huge industry, and many opportunities also mean that it has unlimited development

potential. According to statistics, the total scale of agriculture and grain in China throughout the year was 9.3 trillion yuan, and the total amount of agricultural materials market was 2.2 trillion yuan. In 2014, China's total retail sales of consumer goods reached 26.2 trillion yuan (including 1.3 billion yuan of e-commerce), of which agricultural chain stores accounted for half of the country. The market size of agricultural products is estimated to exceed 10 trillion yuan, and the market size of modern agricultural products is estimated to reach trillion yuan.

From modern agriculture to modern agriculture, China's agriculture is in the stage of comprehensive development. In this process, the combination of policy, capital and technology will trigger a storm level chemical reaction, leading to the overthrow and reconstruction of the entire industry. What has changed is the organization, production and distribution methods of the whole industry, including all links in the industrial chain, and has a wide range of importance. These problems that must be solved and transformed in traditional agricultural production services have brought opportunities to the industry. At the same time, we are still standing in front of the era tide of informatization of planting industry, intelligence of animal husbandry, intelligence of fishery, digitalization of seed industry and diversification of new business forms.

In recent years, China's digital agricultural technology has developed rapidly, breaking through many key digital technologies, developing many practical digital agricultural technology products, and establishing a networked digital agricultural technology platform. He has made important research achievements in the research and application of agricultural information collection technology, large-scale agricultural spatial information resource database, digital virtual design technology of animals and plants, remote diagnosis of agricultural problems, agricultural expert system and decision support system, built-in agricultural remote control system, digital agricultural macro monitoring system and agricultural bioinformatics. Through the application demonstration in various regions, it first reflects the construction of China's digital agricultural technology framework and technology system. The application system and operation management system have promoted China's agricultural informatization and agricultural modernization process. According to the data of Huawei's Smart Agriculture Market Assessment of Network Farm, by 2020, the potential market size of digital agriculture is expected to increase by 14.24% annually, from \$13.8 billion in 2015 to \$26.8 billion.

In the new situation, the positioning of our platform in the market is to focus on the new situation and new opportunities of the economic development of cities and counties, combine the existing business operation foundation and the advantages and disadvantages in the same industry, adhere to the method of classified guidance and local conditions, and refine the market.

#### **4. Products and Services**

The company's projects rely on the understanding and innovation of the marketing and business model of agricultural products in the market. By using APP as the platform, the company connects the business channels between enterprises and businesses, and also provides the marketing model between individuals, and establishes a good communication platform between buyers and sellers to better support the sales of agricultural products. The APP is operated by contacting individual users through online enterprise sales, further simplifying the sales process and transportation mode. The platform ensures the quality of products and improves the interests of both parties.

The sales mode and transportation mode of our platform are as follows: 1. Get in touch with enterprise users and individual users online, further understand the market demand and sales volume, and estimate the types and quantities of agricultural products required. 2. At the temporary storage sites in the periphery of cities and towns, a designated amount of

agricultural products will be purchased from farmers and delivered to the site for storage. 3. Sign the agricultural product purchase contract with the enterprise online, and regularly deliver the products to the place designated by the enterprise user. The surplus is sold by wholesale to individual users. Through the combination of online and offline, and the full use of big data analysis, take advantage of the Internet development wave to propose a suitable agricultural model.

APP breaks away from the single traditional thinking and adopts the combination of multiple functions. It integrates acquisition platform, supply platform, entertainment platform, communication platform and knowledge platform. Let APP become more diversified, enrich knowledge content, and meet the diversified needs of different types of users.

## 5. Marketing Strategy

Our company establishes an online forum for individual users. When customers first consume on our platform, they will be given a forum invitation volume with QQ group ID, WeChat group ID and invitation code. Users can scan the invitation code to enter the forum. The forum will set up relevant fruit introduction, purchasing knowledge and fruit season changing knowledge. Users can enter the QQ group or WeChat group by virtue of their ID on the forum. These two group platforms are provided for users to communicate, which not only shortens the distance between users, but also promotes the sales of fruits. A certain amount of cash roll will be given away at each delivery, which can greatly attract users to buy again. In order to improve the loyalty of users and the attractiveness of the mall, we strive to launch a preferential package every week to improve the loyalty of users and the attractiveness of the platform. Through the list of customers collected from the previous database, we will follow up the customers who have consumed by email, and publish the weekly preferential package on the official forum, and remind the exchange group of the package in different periods, So that more customers can understand and attract customers to buy again.

The promotion marketing adopts the combination of online and offline marketing. Online mainly focuses on the application of advertising words to make them catchy. It can be promoted through magazines, TV, short videos and other multi-channel methods, and can also be optimized through SEO. Make sure that your product is included in the search results of important keywords. Operation not only needs to make clear the core positioning and keywords of the product, but also needs to be intuitively reflected in its own official channels (such as official website, official website microblog, WeChat, post bar and other platforms). There is also soft text promotion. It can be the introduction of product functions and the combination of hot topics. On the one hand, it can enhance the brand influence of Baidu Index, and on the other hand, it can improve the possibility of being searched and retrieved.

Offline promotion is mainly to enable relevant employees to promote APP in stores or communities, so as to improve the coverage of APP. At this time, it should be noted that after the early promotion, users' loyalty should be improved and perfect resource supply guarantee measures should be established. Optimize the operation guarantee system and establish a professional personnel training system.

## 6. Financial Analysis

### 6.1. Initial Investment

The initial investment is mainly used for the selection of storage sites for agricultural products, vegetable supply sites, APP design, initial logistics system construction, online marketing and offline marketing. According to the initial development strategy of the project, it is planned to raise funds with 30% equity at the initial stage, with a total amount of 6 million yuan. The funds

are mainly used for early research and construction. As agricultural products are characterized by strong regional characteristics, difficult storage, inconvenient transportation and other restrictions, certain manpower is required to conduct field investigation and find communities with large demand and high-quality and unified long-term suppliers. Establish an app to realize the transparency and symmetry of information, and provide the supply information of agricultural products to agricultural product demanders in a more convenient and efficient way. Funds mainly come from the following channels.

(1) Government funding. In response to the policy of mass entrepreneurship and innovation, enterprises will be given financial support, which is expected to be 1 million yuan. Taking providing high-quality services to the public as the communication channel, we can gain the public's understanding and praise through practical actions, increase the types of services, expand the scope of services, create a good social image, and ensure the effective realization of high agricultural benefits. Cooperate with college student village officials to reduce redundant intermediate steps and increase farmers' income and initiative.

(2) Social financing. Attract angel investors by taking advantage of the uniqueness of the product, with an estimated financing of 1 million yuan. Make use of publicity based public relations strategy, through various communication media, use the combination of online and offline marketing to better publicize and promote, and form a favorable public opinion and social environment for the enterprise, so as to attract more social financing.

(3) Cooperate with farmers and sellers to raise initial funds. The company has formed long-term cooperation with small and medium-sized enterprises such as hotels and guesthouses in many places to reduce the operating costs of enterprises and obtain financing, with an estimated investment of 1 million yuan.

(4) Bank loans. Banks are constantly expanding their credit support for individual entrepreneurship, with various types of loans and few conditions. The loan is expected to be 1 million yuan.

## 6.2. Financial Forecast

The Company's revenue, cost and profit budget for the next five years is as follows.

**Table 1.** Revenue, Cost and Profit in the Next Five Years (Unit: 10000 yuan)

	First year	Second year	Third year	Fourth year,	Fifth year
Income	46.813	78.368	145.034	215.664	386.746
Cost	52.604	86.754	80.374	104.356	150.598
Profit	-5.791	-8.386	64.660	111.308	236.148

## 7. Risk Analysis

### 7.1. Market Risk

With the transformation from planned economy to socialist market economy, the price fluctuation of agricultural products in the market economy is mainly affected by the supply and demand relationship. Due to natural disasters, sudden accidents and changes in planting structure, agricultural products may be affected by other factors, which will lead to fluctuations in the supply and demand of agricultural products, make prices uncertain, and make agricultural production face certain risks. These are the industry risks of objectivity that the industry may encounter.

It can be divided into the following aspects:

(1) The risk of diversity of market demand changes. With the general growth of per capita disposable income, the public's demand for agricultural products is entering the stage of attaching importance to quality and safety. Moreover, the market demand for agricultural products is not elastic, and farmers cannot rely on market demand to organize production. If output is increased blindly, farmers' income will not increase significantly.

(2) The risk of market forecast deviation, due to information difference, will often lead to errors and deviations in market judgment and forecast, resulting in irreparable losses. On the one hand, this result is unpredictable market demand. On the other hand, farmers have limited ideas and knowledge, which limits their ability to analyze and control market information.

(3) Changes in macro policies related to the industry. The development of all walks of life is inseparable from the support of macro policies. When macro policies change, relevant industries will also change accordingly.

## 7.2. Operational Risk

In addition to objective social risks, enterprises also have their own operational risks. With the deepening of China's reform and opening up, the reform of the agricultural market has promoted the establishment of the rural market system, optimized the agricultural economic structure and promoted economic development. At the same time, it brings greater risks to agricultural operation. At present, China lacks a special risk management organization, so the anti risk ability of the agricultural market is weak. The management system of agricultural technology risk and agricultural product market risk is not perfect, so it is necessary to gradually establish an agricultural organization, increase investment in agriculture, strengthen the comprehensive risk prevention ability of agricultural resources, gradually improve the agricultural natural risk management model with agricultural insurance as the focus, and encourage agricultural prevention and management of issues related to how to deal with industrialization and other agricultural commercial risks. As China is still in the early stage of implementing agricultural operation risk management measures and lacks experience, there are still many problems in agricultural operation risk management, mainly in the following aspects.

(1) Lack of specialized risk management organization. China's risk management has just entered the enlightenment stage. There is no agricultural risk management institution in the country and no relevant institution has been set up locally. Therefore, China lacks the organizational guarantee necessary for agricultural risk management. From the perspective of the government, there are no experts or institutions engaged in agricultural risk management research, nor are there technical operators. At the same time, agricultural risk management laws and regulations have not been improved.

(2) Non agricultural resources and damage to agricultural production and operation environment. Although China's land area is the third largest in the world, the per capita cultivated land resources, water resources and agricultural resources are in short supply. The per capita cultivated land is small, and the obsolete rate of farmland water conservancy facilities is as high as 30%.

(3) Prevention and remedy of disasters in agricultural risks. Since the founding of the People's Republic of China, governments at all levels have always attached importance to compensation for agricultural disasters. In terms of agricultural disaster prevention, China has always advocated the protection of farmland infrastructure and the study of ways to combat pests and drought and salt resistant varieties. When ecological and economic interests conflict, people are always driven by economic interests, giving priority to current economic interests, while ignoring long-term interests and disaster prevention concepts.

(4) The agricultural technology risk management mechanism has not yet been established. China's current agricultural technology expansion system is only responsible for technical issues. The introduction of new technology brings risks of other factors.

(5) Agricultural market risk has increased, and market risk management measures have not achieved significant results.

(6) There are serious problems in the subject of agricultural risk management. Farmers are weak and their economic level is limited, so their agricultural risks are limited. Due to the low quality of risk management subject and the lack of risk management knowledge, it is difficult to complete the important task of agricultural risk management.

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