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UNIVERSAL E-COMMERCE BASED ON AGRICULTURE WITH ADVANCED CMS/ADMIN PANEL

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Abstract:

This paper analyzes the current e-commerce problems of fresh farm products and proposes an ecommerce network for fresh agricultural products. Agri e-commerce may disrupt traditional agricultural value chains Traditional agricultural value chains involve multiple farmers-consumer intermediaries. Farmers typically sell their produce to middlemen at the gates of the farm. Produce then goes through several intermediaries before reaching the end-customer. As a result, farmers receive only a small proportion of the price paid by the end consumer, as a profit is received by each intermediary in the value chain. Agri e-commerce offers the opportunity to streamline the value chain of agriculture and the inefficiencies in the delivery of farm produce. It is a new way for producers to sell their products to a range of consumers, including farmers. Agri e-commerce also improves the access to new markets for farmers and brings accountability to the value chain. This helps farmers to bypass several intermediaries, resulting in higher wages for producers, decreased waste and the ability to provide fresher consumer product. These benefits are particularly important in developing regions, where over 97% of people in agriculture stay. The e-commerce business model is the conceptual structure of business to business, business to customer, customer to business and customer to customer business strategy. In this paper applicable for business to business and business to customer strategy. An e-commerce store is all about storage, efficiency and larval frameworks is the best choice, it's a lightweight, fast and

stable platform. A great website with right technologies for building the internet. We have used best technology tool. It was producer with SASS. In addition, you can evaluate the overall transaction process, making the transaction smoother, more straightforward and more interesting. In addition, the integrated custom portals address isolated knowledge islands, and the counterparts help parallel processing. This may thus increase the operational performance of the whole society.

Index Terms—**Agri-e-commerce platform, B2B application, online store, shopping application.**

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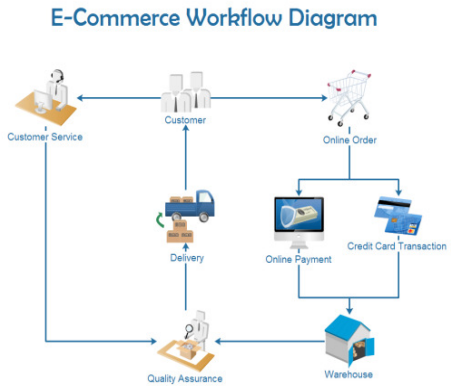
I. INTRODUCTION

It becomes more and more difficult to manage the e-commerceplatformoffreshagriculturalproducts. The most import problem is that there is no excellent solution of e- commerce platform for fresh agriculturalproducts. Fresh agricultural products mainly includes the fresh primaryproductssuchasvegetables,fruits,flowers,meat,eggs, milk and aquatic products. Freshness is an important indicator to determine the value of these fresh produce. Due to the characteristics of perishability, seasonality and freshness of fresh agricultural products, it is very import and difficult to design the solution of the e-commerce platform for fresh agriculturalproducts. Informationsystem.Through mobile geographic information technology, we can realize large-scale, socialized, real-time division and cooperation on the basis of geographic information, accomplish the e-commerce model based on personalized needs, intelligent production, and social supplychain.

A. Characteristics

Ecommerce exhibits the following key characteristics

- Scalability
- Security
- Direct delivery
- Light-Weight Architecture



I. THE MAIN EXISTING PROBLEMS OF E-COMMERCE OF FRESH AGRICULTURAL PRODUCTS

The main existing problems of e-commerce of fresh agricultural products of China are as follows:

- The general prices of fresh agricultural products are low, so it cannot afford higher logistics distribution costs.
- Thedemandforfreshagriculturalproductsissmall:

the varieties of fresh agricultural products purchased by ordinary households every time is plenty, and the quantityisverysmall.Thefresh-keepingtimeofthose fresh produce is generally only one day, which causes that the logistics distribution of fresh agricultural products is small-scale, scattered, and very urgent, Paragraphs should bejustified.

- The requirements for preservation and distribution of each fresh agricultural product are different. For example, water is needed during fish preservation and thefreshtransportation,eggscannotbebumpedduring transportation, vegetable cannot be squeezed during transportation, and the temperature needs to be controlled while transportingmeat.
- The cost of ordinary e-commerce express delivery is highandthetimeislong.Accordingtostatistics,the logistics cost of fresh agricultural products orders of China is as high as 25%-40%, while the logistics cost of clothing and electronic products is only about 5%. High logistics costs have become a bottleneck factor restricting the development of e-commerce of fresh produce.

In order to solve this problems, we propose a new solution for fresh agricultural products e-commerce platform based on mobile geographic information.

II. LOGISTICS AND SUPPLY CHAIN DESIGN OF FRESH AGRICULTURAL PRODUCTS E-COMMERCEPLATFORM

Wedesignedthefollowinglogisticsandsupplychain model design of fresh agricultural products e-commerce platform on the basis of geographical distance, as shown in Figure1.

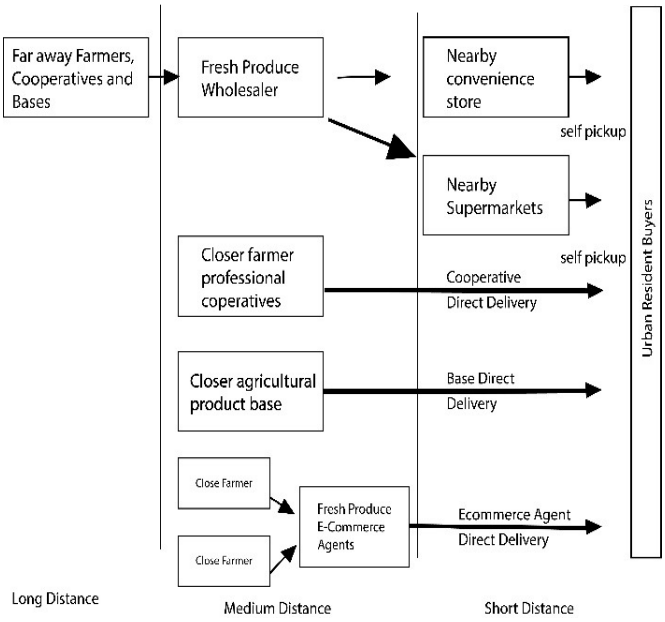


Figure 1. Logistics and supply chain model design of fresh agricultural products e-e-commerce platform

As is shown in above figure, there are three methods of logistics and supply chain model of our fresh agricultural products e-commerce platform:

a. Use the existing logistics and supply chain model of fresh agricultural products based on wholesale for long-distance farmers, cooperatives andbases.
b. Usethemethodofdirectdeliveryfromproducingarea ofmiddle-distancetoachievelogisticsdistribution:this method can reduce transportation loss, decrease transportationtime,ensurefreshness,and makefulluse of residents' refrigerator storagespace.

c. The nearby merchants of fresh produce can adopt self pick-up method to achieve logistics distribution: this method is actually the logistics distribution method withthelowestcostandtheleasttransportationtime.

III. E-COMMERCEMODELDESIGNOFFRESHAGRICULTURAL PRODUCTS PLATFORM

The e-commerce platform exists as an intermediary betweenthetwotransactionparties(buyersandsellers)offresh agricultural products, and the e-commerce platform operator itselfdoesnotproduceandsellfreshagricultural products.

The platform adopts concomitant e-commerce models of B2C, F2C, C2F, C2C and O2O based on mobile geographic information system. The e-commerce model design of the platform is shown in Figure 2.

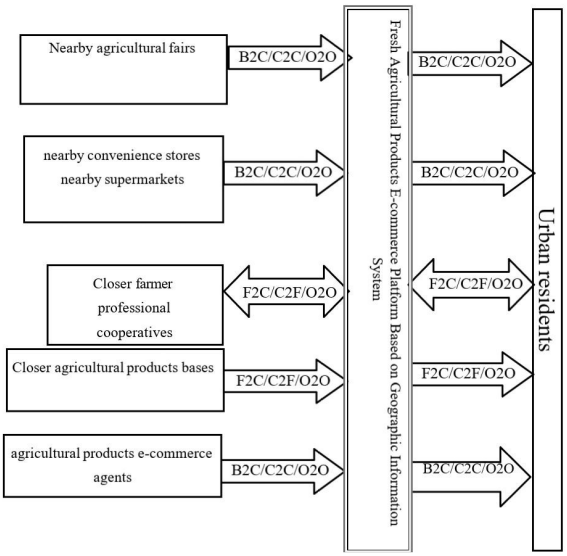


Figure 2. E-commerce model design of fresh agricultural productsplatform

IV.TRANSACTIONPROCESSDESIGNE-COMMERCEOFFRESHAGRICULTURAL PRODUCTSE-COMMERCE

A. Transactionprocessdesignformerchantsoffresh agriculturalproducts

Themerchantsoffreshagriculturalproductsinclude nearby conveniencestoresoffreshagriculturalproducts, merchantsin agriculturalfairsandsupermarkets.Accordingtothedesignof Logisticsandsupplychainmodeloffreshagriculturalproducts e-commerce, it mainly matches and pushes the fresh agricultural products merchants according to the geographical locationofbuyers,atthesametimeconductsranking referring to the evaluation points of the fresh agricultural products merchants and the price concessions. The transaction process design of of fresh agricultural products merchants with the

lowestcostwedesignedisshowninFigure3.

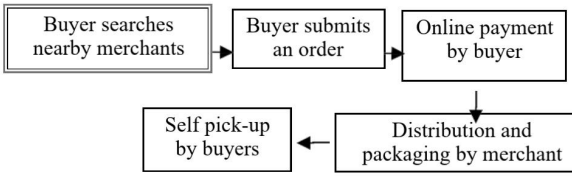


Figure 3. The transaction process design of fresh agricultural products merchant

B. *Transactionprocessdesignforfarmerprofessional cooperatives and agricultural productsbases*

For the farmer professional cooperatives and agricultural products bases of middle distance to buyers, we designed the group purchase process based on geographic information, as shown in Figure 4.

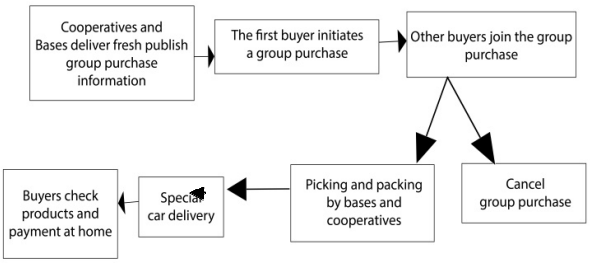


Figure 4. Group purchase process design of farmer professional cooperatives and agricultural products bases

Therearetwocriteriaforthesuccessofthegrouppurchase offreshproducebasedonthegeographicinformation:

- the participants in the group have a certain distance from each other, only the buyers within the distance can participate in the same group, and the limit of this distanceissetbytheinitiatorofthegroup.

- The group purchase requires that only reaching to a certainamountofsomefreshproductsales volumecan be considered as success of a group. Ordinary groupis measured according to the number of products or the number of customers. For example, the relatively successful grouping e-commerce platform Pinduoduo conducts grouping based on the number of customers. And the group purchase in e-commerce platform requires to be measured according to the total price of thegoods.Bylimitingthegeographicallocationofthe group buyers and the total price of the group, we can increase the profit of every order of fresh produce transaction,meanwhilereducethelogisticscost,ensure the profit of farmer professional cooperatives and agricultural products bases, and give buyers more discounts after the reduction of the costs. We believe that this purchase process is one of the most efficient trading models for fresh producee-commerce.

C. *Transactionprocessdesignfore-commerceagentoffresh agriculturalproducts*

Because the middle-distance farmers will not use the e- commerce platform due to the decentralized operation and knowledgelimitation,theyalsodon'thavedistributionvehicle to realize the delivery of fresh agricultural products directly to thebuyer'saddress.Therefore,weputforwardtheroleoffresh produce e-commerce agent. The main business of fresh produce e-commerce agent is to help farmers who are close to

thecitysellfreshagriculturalproductsthroughthee-commerce platform. The main body of the fresh produce e-commerce agentcanbefarmerswithcertainknowledgeorentrepreneurial college students. Transaction process design of fresh produce e-commerceagentsisshowninFigure5below.

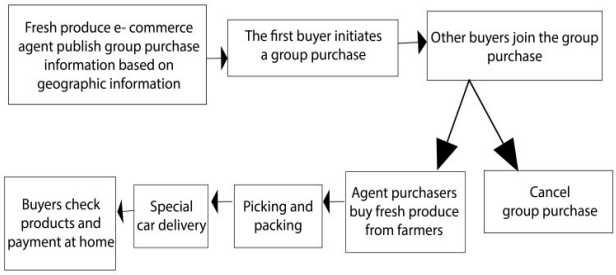


Figure 5. Transaction process design of fresh produce e-commerce agent

II. THE DESIGN OF LOGISTICS DISTRIBUTION MODEL OF FRESH AGRICULTURALPRODUCTSE-COMMERCEPLATFORM

We designed the following logistics distribution models based on the logistics and supply chain model and transaction process model of the above e-commerceplatform.

A. *Thelogisticsdistributionmodeofnearbymerchantsisself pick-up bybuyers.*

Sincethequantityandtotalpriceoffreshproductsrequired by each household are small, if the merchants are separately delivered,thedistributioncostwillbetoohightobeprofitable. Therefore, we believe that the traditional way for buyers to go to the nearby stores and pick up products by themselves is the most economical way for nearbymerchants.

B. *The logistics distribution model of the close-range productionareaisdirectdeliveryfromtheproductionarea.*

There can be three forms of what we call production area, the first is the large production base of fresh agricultural products; the second is the farmer professional cooperative of fresh agricultural products; the third is the scattered farmers and the e-commerce agent will help them distribute the products. The method of direct delivery from the production area is to send the special vehicle to the consumers immediately after picking or processing the fresh agricultural products at close range. We think this is the best logistics distribution method for close-range production area.

Of course, the direct delivery of close-range production area is based on the above-mentioned group purchase accordingtothedistanceandthetotalprice.Throughthegroup purchaseaccordingtothedistanceandthetotalprice,wehave gathered the low-priced small orders dispersed geographically and transformed them into large orders with high total price and concentrated geographical position, thus creating two economic conditions for the production area though the direct delivery of fresh agricultural products to the customer's home withbyspecialvehicle:thefirstistoincreasethetotalpriceper distribution, and the second is to reduce the proportion of logistics costs perdistribution.

The advantages of direct delivery from close-range production area are asfollows:

- The logistics path of this distribution method is the shortest path between fresh produce and consumers, and it is also optimal. It can arrive on the day of the delivery of fresh agricultural

products, which solves theproblemofsamecitydeliverydelayofth eordinary express companies. At the same time, the seller, as the producer of fresh agricultural products, knows the preservationtechniquesofagriculturalpro ductsbetter. This ensures the freshness of the fresh produce in the distributionprocess.

Direct delivery from close-range production area can reduce the intermediate links of logistics and supply chain of fresh agricultural products, increase the profit of fresh products producers, and allow consumers to get more affordableprices

c. *Thelong-distancelogisticsmodeloffreshagricultural products retains the logistics distribution channels of traditionalwholesale.*

Because the logistics distribution costs are very high in the long-distance distribution across provinces and cities, onlywhen the total distribution amount of fresh agricultural productsislarge,theaveragelogisticscostoffresh agricultural products can be reduced, so the traditional wholesale logistics method is most economic and efficient in long-distance distribution. The traditional logistics and supply chain system of fresh agricultural products wholesale is irreplaceable under the current conditions in the long-distance distribution across provinces and cities.

CONCLUSION

Starting from the existing problems of fresh agricultural products e-commerce, this paper studies and proposes a new solution for fresh agricultural products e-commerce platform based on mobile geographic information. We believe that this solution can become one of the best solutions in the existing conditionsoffreshagriculturalproduction,logist icstechnology, informationtechnologyandmobilecommunicat iontechnology.

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