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## E-commerce Innovative Development in Rural China

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**Abstract:** "Developing rural e-commerce, constructing new beautiful socialist countryside" is the Chinese farmer's dream, and also is a beautiful Chinese Dream. Based on achieving the beautiful dream, this paper begins with an exploratory research on E-commerce Innovative Development in Rural china. This paper firstly reviews the development status of rural e-commerce at home and abroad, secondly originally designs a blueprint and gives the corresponding countermeasures for realizing the blueprint, Lastly makes feasible solutions to achieve key technical issues. Part of the research fruits has been applied to Conghua City in Guangdong and has achieved experimental success. In view of the development and construction of new rural countryside of e-commerce is a new thing, this thesis research is only for peer discussion.

**Keywords:** rural china, e-commerce, logistics, internet, innovative development

### 1. INTRODUCTION

How to construct new rural ,settle “three Rural Issues”and narrow the urban-rural gap has become a basic national policy.But how to support this vulnerable group of farmers, building a happy and harmonious new countryside, and promote rural modernization,it is a thought-provoking questions! The below is the summarize of the initial motivation of this thesis:

(1) Both buy (agricultural resource product) and sale (agricultural product) are difficult :Take the famous “Tangerine hometown” NanFeng country in JiangXi province for example, Its harvest last year (The county's annual production is 2.3 billion), but 70% of it is overstocked, it's difficult to sale agricultural product; With rural "empty nest" families become a large scale, especially Left elderly population in remote mountainous areas is difficult to buy fertilizer, seeds, home appliances and other agricultural products,but agricultural resource product is also difficult.

(2) Lack of effective agricultural and agricultural goods tracking system: “Hunger breeds discontentment” . In recent years, agricultural product safety incidents vicious (such as “Shennong erysipelas ginger” in ShanDong, “Cadmium rice” in GuangZhou etc.) Frequently occured, Seriously affect the health of consumers; at the same time, Entrap farmers phenomenon (such as fake pesticides、 fake seeds etc.) Constantly occured, brought huge economic losses and mental harm to farmers.And thus lead to a serious crisis of confidence in government and business.

(3) The Internet has made urban-rural gap:According to China's rural Internet Survey Report 2011, Application size and level of internet widening urban-rural gap [1].Urban residents enjoy the happiness brought by the Internet and information, shop at home, stay at home online shopping has become commonplace, while farmers in remote mountainous areas of material and spiritual world is still poor monotonous.

(4)The rapid development of new countryside is an urgent need to reduce logistics costs:The rapid development of modern agricultural technology, bringing to improve rural productivity, but also makes a huge amount of agricultural logistics (According to incomplete statistics, in 2012 the total logistics of agricultural products reached 700 million tons), and the characteristics such as logistics nodes scattered, and the lack of

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fresh seasonal produce desired cold chain technology and equipment, making the urgent need to improve rural infrastructure and integrated logistics and logistics, so that the logistics speed and reduce logistics costs.

(5) According to Roland's famous model, the rapid development of China's rural e-commerce is historically inevitable. Roland is a world famous model of IT development stage on the model, it is bound to think ITS development from low to high and is divided into five stages of development. According to the Roland model, the application of e-commerce platform was developed in rural areas, "prairie fire" in a mature stage. The development of Chinese rural e-commerce is a "spark" are the initial stage. The rapid development of China's economy today is the world's attention. Therefore, e-commerce platform for China's rural network construction from the "spark" development "prairie fire" is historically inevitable.

## 2. CURRENT RESEARCH

The typical application on rural e-commerce practice was in the early 1990s, on Texas Mobil Seoul farm (Mamdani, EH, 2005), and it's Japan's three strains of agricultural societies who was the first typical application rural e-commerce in the late 1990s (Ryuhei, 2006). Cliff Allen, Hamel. J. A. (2007) based on famous stage IT---Nolan models (Richard L. Nolan, 1973), divided the rural e-commerce application level in more than 70 countries around the world into five stages. The United States, Japan, Germany and other 19 countries located in Europe and Asia among the maturity Nolan mode, and The Chinese and other 36 Asian and African countries are in their infancy (Mary C. L., 2008). Currently, the application of e-commerce in full swing in rural areas of developed countries. Apply its rural e-commerce platform was "a prairie fire." In the US, 98.7 percent of the farmers can stay at home through rural agricultural marketing and e-commerce platform to obtain domestic and international agricultural information; In Europe, Germany has been established in rural areas rural e-commerce platform in Europe, North America, Japan and other countries in the communications network; Japan's rural e-commerce platform in the 1940s began to extend to the rural telephone network via telecommunications, and now Japan has formed a multimedia smart TV, telephone, Internet and other e-commerce platform integrated rural (Gill, H.S., 2007; Cooke G J., 2008). At present, the international trend is to study how to integrate the domestic platform constitutes an international e-commerce platform in rural areas, where research focuses on the import and export of agricultural food security monitoring, trade protection barriers, production logistics standardization issues [3-5].

And comparing the developed countries, China's rural e-commerce applications in its infancy. Rural e-commerce drive mode can be divided into three types: government-driven mode, drive mode folk hybrid drive mode. Politics. the typical application of government drive mode is the e-business initiatives in rural areas in 2006 Xiuying Haikou City, and the Folk drive mode typical applications include Heze farmers sell flowers online. More distinctive of hybrid drive mode applications are functioning in Mudanjiang City, Heilongjiang Province, the site of the three Sino-Russian trade. But these drive mode is difficult to develop due to regional restrictions, you can not communicate information between sites, "islands of information" is serious, and most of the site with limited functionality and not only publish information online transactions. Our government has always keen to promote e-government and e-commerce (1998, 1999, respectively, is our business online, the government on the Internet), but the importance of rural e-commerce is only in recent years with new rural construction is gradually strengthening. There are more and more domestic scholars research on rural e-commerce, such as Wang XiaoDong, ChenLei, WeiLingJing, GanXueSong Et al. [6-9], However, lack of planning and design studies rural e-commerce platform built on national and global e-commerce platform is the rural research trends [10].

How to build new box of network marketing theory based on e-ASC (rural e-commerce supply chain), And under the guidance of theoretical Framework, Combined with the characteristics of uneven development,

Research the development law of new rural construction e-commerce, Construction of new platform of rural e-commerce platform, promote the development of rural e-commerce? Then promotion our rural e-commerce applications to a higher stage of development ,which is to promote the new rural construction, to solve the "three rural" issue of research a very theoretical and practical value.

### **3. SUGGESTIONS FOR THE DEVELOPMENT OF CHINA'S RURAL E-COMMERCE**

Farmers are vulnerable, must be led by the government to help push the strong rural e-commerce. Now the development of rural e-commerce better vision and recommendations are summarized below:

#### **3.1 Building double E-markets**

Online e-market in rural areas to build double facilitate the farmers stay at home, use the phone or the Internet way to buy (agricultural products) sold (farm), increase farmers' happiness index.

Double E-markets in rural areas (referred to as the rural dual electronic market) also has two electronic market (agricultural electronics market, agricultural products electronic market).Electronic marketing of agricultural products are farmers or agricultural enterprises producing, processing of agricultural products, agricultural products of electronic marketing is needed for subsistence farmers or production (such as home appliances, seeds, fertilizers, pesticides, cement, digital video discs, etc.).Dual electronic markets facilitate the farmers in rural homes, using a cell phone, telephone, or Internet way to buy (agricultural products) to sell (produce) and increase their sales and purchasing power.More importantly, China's agricultural products, especially in favor of local agricultural products quickly at a low cost to develop the domestic market, to enter the international market, But also help farmers buy agricultural products directly online to agricultural products provider, increase farmers' ability to bargain, reducing the channel intermediate links, and can be integrated logistics, reduce the purchase cost of agricultural products, Especially the elderly and children left behind in rural areas to help solve difficult to buy production, subsistence.

#### **3.2 Integrating dual positive rural logistics**

Integrating dual positive rural logistics, making agricultural vehicles loaded with produce from early morning (rural → city), but also loaded with agricultural products and naturalization (cities → rural), reduce agricultural vehicles load rate, and rapid urban and rural logistics green channel.

Rural logistics consists of two bi-direction forward logistics: a direction that flows from the rural areas of logistics, the other direction is the city's agricultural product logistics flows from rural agricultural city.Also included in both directions reverse logistics (such as return logistics or recycling logistics).E-commerce logistics bottlenecks, which in logistics infrastructure behind more prominent in rural China.Integrated with Mobility under the flow of information through online orders rural two-electron two-way rural logistics market integration, as well as play a role in the integration of logistics distribution centers in rural areas (such as in accordance with the delivery time, delivery and other goods to integrate and match goods vehicles, etc.), making agricultural vehicles morning comes fully loaded Rural → cities: urban residents need full of fresh produce destined for the city's major supermarkets, hotels, markets, etc.), In the evening can be a rewarding experience agricultural vehicles(City → countryside: farmers need full appliances, fertilizer and other agricultural products), Reducing agricultural vehicles load rate and logistics costs, while rapid urban and rural green logistics channel, driven by the prosperity and development of the rural economy.

#### **3.3 Constructing of agricultural supply chain traceability system**

Construction of agricultural products / agricultural supply chain online bidirectional traceability system is conducive to agricultural food safety to combat crime, a "plow-to-table" green logistics channel, but also conducive to agricultural products traceability shoddy sources, protect farmers' interests.

On the one hand, by the farmers, rural cooperatives, rural distribution centers and integrated production of

fertilizers, pesticides, seeds and other agricultural products manufacturer constitute retroactive chain, can blow fake seeds, fake pesticides Kengnonghainong act effectively and recover for farmers harmful agricultural products; On the other hand, by farmers, rural cooperatives, rural and urban distribution centers integrated fresh agricultural products supermarkets, hotel and other agricultural products constitute traceability chain, the origin can be traced back through the online query box on agricultural commodity code, Even in rural areas can be tracked online Granny sell a soil eggs: egg carton specific as to the earth by the village to the uniform numbers, and soil egg shell with a brush to write home number, the urban consumers can check online "soil number + number "chicken eggshell egg crates found on Granny's egg Which quality problems.

### **3.4 Construction of "farm shop" online supermarket chain**

Construction of "farm shop" online supermarket chain, unified procurement, unified distribution, sharing inventory and reduce logistics costs.

In the basic realization of "one village shop" (a village an entity farm shop)、"One Village One Product" (a village in one kind of agricultural products),By rural e-commerce network platform, several villages of the entity "farm shop" to build "farm shop" online supermarket chain in the online Internet."Farm shop" online supermarket chains sell both villages featuring direct net agricultural to urban residents, but also may apply to large-scale agricultural product providers (such as the city's major department stores as well as fertilizers, pesticides, seeds and other major brand manufacturers ) unified procurement of agricultural products."Farm shop" online supermarket chain unified purchase orders can be integrated to improve the ability of farmers to bargain shop, and uniform distribution is able to reduce logistics costs, the corresponding lower agricultural commodity prices to benefit farmers.

### **3.5 Operating the construction of rural distribution center**

Standardize the construction of rural distribution center, forming a network of agricultural marketing, scale, brand and internationalization

Rural distribution center is the hub links between urban and rural areas.On the one hand, it bears the rural →urban agricultural processing, packaging (including bar code affixed tracking, grade calibration), warehousing, distribution and distribution, etc., but it also bears the storage cities → rural agricultural goods, logistics integration distribution distributions.For example, such as: the old lady in the village, "soil eggs" package through the distribution center, standardization, brand operation sold around the world; farmers to buy fertilizer plant agricultural products directly through electronic market fertilizer distribution centers in rural areas can be integrated delivery distributed to the "farm shop" and even farmers at home.In rural areas of logistics and distribution centers can achieve double forward logistics integration and car goods match, economies of scale, reduce rural truck load rate. Such as third-party logistics company vehicles loaded with agricultural products can be shipped to distribution centers in the rural countryside, but also can be loaded with agricultural products destined for the city.

### **3.6 Forming rural inventory pool**

Construction of the "agricultural product provider network + Intranet Intranet network provider demand for agricultural products distribution center + rural farm shop chain" as the main agricultural products e-ASC / agricultural stocks shared pool, convenient low-cost urban and rural residents to share green fast logistics channel and reduce inventory costs..

e-ASC shared pool divided into two categories: e-ASC agricultural goods inventory pooling, e-ASC agricultural stocks shared pool.The former provide farmers with agricultural goods inventory sharing service, which provides shared services for agricultural stocks urban residents.In e-ASC agricultural goods inventory shared pool of pesticide products, for example, in order to protect the normal farming needs, the traditional practice of farmers to be more than enough to store pesticides in advance, often lead to waste too much to buy

pesticides, and stood at home neither safe, next year they fail pesticide; Once purchased less, go buy, traveling back and forth does not say, may out of stock, resulting in significant losses of crops. The use of e-ASC agricultural products shared pool, village farm shop buy pesticides, rural e-commerce information platform can share, to the nearest store to buy the farm, if haven't, you can go to the nearest distribution center to pick up, or not, can be directly connected to the pesticide manufacturers, agricultural products can even share the pesticide inventory pooling resources near the homes of villagers through this e-ASC. According to the principle of shared pool by ABC farm shop chains, agricultural goods providers, logistics and distribution center inventory shared. Agricultural goods inventory shared pool shared not only the new agricultural product inventory, you can also share the old agricultural goods inventory (such as the old DVD, Dian, etc.). For example, the new large-screen LCD TV, then his home half the new and old TV information can be stored in a city when residents of the home purchase agricultural goods inventory shared pool, allowing farmers to cheap to buy or lease.

### **3.7 Building online commune**

Build online commune, to facilitate the farmers work, see a doctor, to improve the efficiency of government officials, but also China's rural e-commerce a leading international window

Online commune platform integrates online township government, hospitals online, online schools, online post office, online farmers' club. Rural area of China's vast population living in scattered farmers difficult and hard work to the township government, especially the empty nest is very serious family problems. Important features of the online club is Qinzileyuan farmers, allowing children to stay (for the elderly) in the online and remote working parents (children) online video chat, enjoy the family; In view of the farmers into the city difficult and hospitals nationwide on-line e-commerce platform to link rural areas, initially identified the disease through video chat, and doctors appointments; Farmers can cultivate information online school, and so that rural children to enjoy free and open educational resources; Township government through online job notices, farmers can learn the whereabouts of officials (in the office, in the countryside, in the field trip, sick leave, etc.) to facilitate errands, while officials for farmers through Internet remote office. Online township government propaganda to farmers in rural areas can also be national policy, issued weather forecast information, forecasting sales of agricultural products prices and other. For some of the characteristics of agricultural counties (such as the ancient village tourism county, etc.) can be opened to international e-government website, via the Internet this global platform to showcase the local style open directly to the world.

### **3.8 Training Information farmer**

Training Information farmer will help to point to drive the overall increase farmers' scientific and cultural qualities, and the establishment of rural e-commerce digital certificate authentication center, farmers will be able to effectively prevent and protect the rural internet fooled double the smooth functioning of the electronic market.

Information farmer is able to communicate with the Internet, e-commerce technology and know how online learning can remotely farmers agricultural technology, which is the subject of rural e-commerce platform. The Internet is the virtual economy, there are a lot of commercial fraud, rural e-commerce platform is no exception would be in violation of these commercial fraud. Led by the Government to effectively design, "government + university institutes dot com + farmers, agricultural cooperatives" four stable information farmer training mechanism will help to point driven scientific and cultural qualities of farmers to improve the overall, While establishing rural e-commerce digital certificate authentication center by the major brands of agricultural products supplier and trader of agricultural needs of the center to the platform operator issuing digital certificates, so that farmers as they have a red shield logo and brand manufacturers transaction, can effectively avoid the occurrence of fraud network.

## 4. FEASIBILITY ANALYSIS AND KEY TECHNICAL ISSUES

### 4.1 Feasibility analysis

The current discussion about whether they can adapt in rural areas of rural e-commerce platform construction project, the project team members through access to a lot of relevant literature, and depth of the country's 13 provinces and cities in rural areas to carry out an extensive survey work, think of Rural Development E-commerce is a viable rural. Now conduct a feasibility analysis from the following four aspects:

(1) Economic feasibility: An old computer, you can make an ordinary phone connected to the e-ASC peasant platform in the country and even the world, such as the opportunity to seek and obtain the sale of products through the integration of Integrated Action Network online orders with a two-way flow of rural logistics, reduce logistics costs, increase farmers' income, the prosperity of the rural market. The Chinese government is currently building new rural information technology investment 4000000000000 implementation of the "home appliances to the countryside", "village computer" and policy support for the development of the rural countryside of e-commerce to provide sufficient financial support.

(2) Technical feasibility: For users of the network platform (such as farmers) in terms of access to the Internet as long as the receiving or sending text messages using a mobile phone on the line, the cost of technology is not high. Increasingly large-scale rural Internet users (as of the end of December 2012, China's rural netizens reached 156 million, accounting for 27.6% of China's total Internet users) [11] and rural pupils universal application of computer technology to provide the foundation of the masses; And simple marketing website development technology, a master net / J2EE architecture WEB ordinary skill (such as a computer or information management professional undergraduate) can do the job most of the development work.

(3) Social feasibility: Our government is giving a lot of new rural construction support (such as 90% of rural broadband plan, village roads program, electronic dot com farmer training programs for farmers, Student Village, etc.). Many well-known IT companies (such as Lenovo, Dell, Hewlett-Packard, China Telecom, etc.) optimistic about China's rural market, its low-end network access equipment have been pouring into the rural market. From domestic and foreign aid each university institutes (college students volunteer service team, network access to the countryside and cultural events, old and new computer donations rural schools, agricultural experts intelligent databases, etc.). Support from the international community (such as the Ministry of Rural UN aid program for developing countries, Microsoft China donated Haikou City, the development of rural e-commerce, etc.).

(4) Subjective Objective necessity: Subjectively, as modern farmers desire a strong desire to get rich and to improve the ability of wealth, they need to develop e-ASC platform; Objectively, according to the law of the famous IT development stage Nolan model, developed rural network marketing application was "prairie fire", and the application of rural e-ASC platform from "spark" development "prairie fire" is historically inevitable.

### 4.2 key technical issues

Development of rural e-commerce is not just a beautiful vision, more importantly, from the economic, technical, organizational management, social feasibility achieve it. Key and difficult problems limited space problem, we only needed to implement the rural e-commerce platform, a brief analysis of key technologies.

#### (1) Online rural dual electronics market planning

Online rural dual electronic market operation processes shown in Figure 1, the research will focus on: the six levels (support technical level, information resources layer, application layer, network platform layer, the interface layer and user layer) information on the two-way electronic markets sharing platform, matching supply and demand information, digital certification center design. Research difficulty is: personalized Cyber space design and intelligent Agent technology. Part of the digital certificate to encrypt the following pseudo code demonstrates:

```

Key_Expansion (byte Cipher_Key, word Expande_Key)
{
  for (i=0; i<=Nk; i++)
    Expande_Key[i] =Cipher_Key[4*i+ k];
  for (i =Nk; i<=Nb*(Nr+1); i++)
  {
    temp = Expande_Key[i-1];
    if ( i%Nk ==0 )
      temp = Sub_Bytes( Rot_Bytes ( temp ) ) ^ Rcon[i/Nk] ;
    else if ((Nk ==8) && (i%Nk ==5 && (i%Nk ==3)))
      temp =Sub_Bytes(temp);
    Expande_Key[i] = Expande_Key[i-Nk] ^ temp;  }}

```

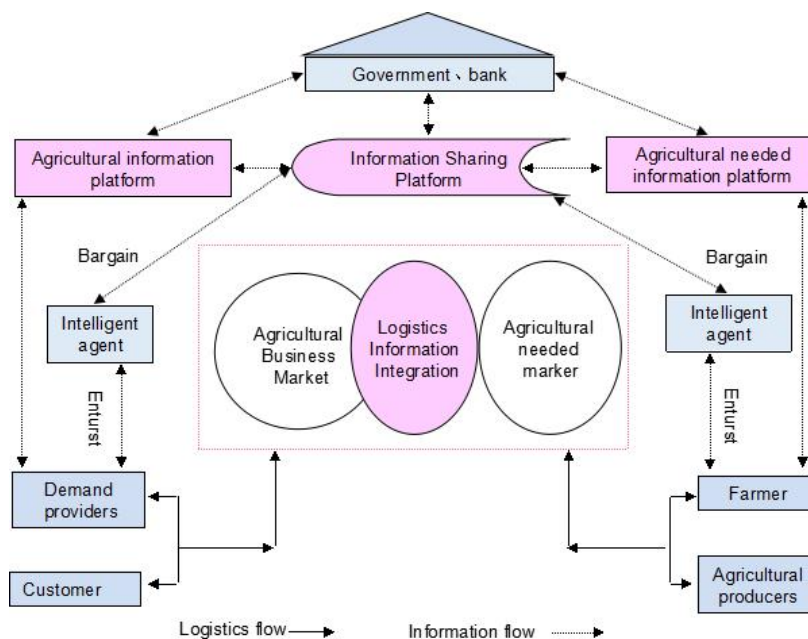


Figure 1. Operation flow diagram of online rural dual electronic market

## (2) Agricultural products / Agricultural share inventory Pool Design

"Agricultural product provider network + Intranet Intranet network provider demand for agricultural products distribution center + rural farm shop chain" as the main agricultural products / Agricultural share inventory Pool shown in Chart 2. The research will focus on: building online farm store chain, with ANN, ISM, SCM, OR and other technical methods, in a two-way rural logistics information integration, integrated logistics and distribution line design, rural distribution center location, 3PL provider selection modeling conduct research. Difficulties in the study are: based on "VMI + JMI + CPFR + Drip Shipping" mixed-mode design shared pool Pool, as well as the location and function of the design of multi-level rural logistics distribution center. Part of the logistics information integration algorithm pseudo code demonstrates the following:

```

SELECT Goods_name, Goods_name, event_Time
FROM Sending_event, goods b, Com_address c;
Group Gsort_ID
Having a.event_Time >=start_time and a.event_Time <=end_time;
and a.goods_id=b.goods_id and a.goods_id=b.goods_id;
and c.start_adress=a.start_adress and c.b.endadress=a.end_adress;
ORDER BY event_Time;

```



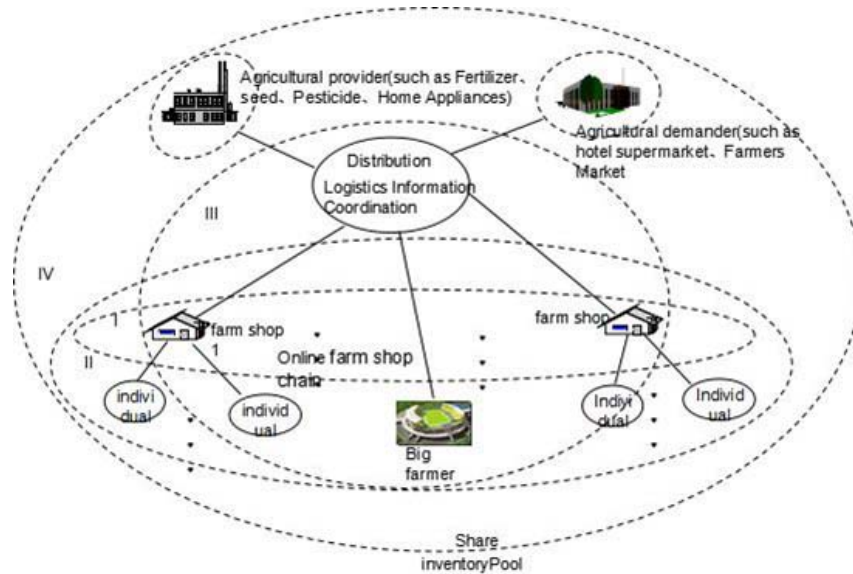


Figure 2. Agricultural provider/demander share inventory pool

### (3) RFID-based bi-directional traceability system design

e-ASC bidirectional traceability system shown in Figure 3, whose research focuses on: EPCIS complex event handling mechanism, containing a process variable spreading codes based (internal) and serial tracking method based on minimization of the whole path (external) traceability methods. Research difficulty is: RFID data e-ASC each node package, process flow design integration, encryption, exchange, etc., as well as event-driven RFID-based supply chain traceability system model construction. The pseudo-code algorithm follows the demonstration part retrospective:

```
public tracing_track {public Set_tracing(String_start, String_tend, String_epc)
{ int temp_Read_pointID, datetime temp_date1, temp_date2;
  EPCIS = new TDBCI(); // Create a new interface_object
  Set_out_put=null;
  String v_epc=Orging_ID_Code;
  String_start=date()-temp_date1;
  String_tend= date()+temp_date2;
  time_Db_Conn_conn = new time_Db_Conn();
  if (conn.db_Conn(t))
  { out_put = t.execute(validtime period[time_start +time_stamp + time_tend)
    Select Read_point_ID
    from Reading_Event a,write_event b;
    where a.symol-end= a.symol-start and Result_Row_row = out_put.first_Row(); and min(t)
    <=min_f);
    System.out.println(out_put.createString());}
  return out_put; }}
```

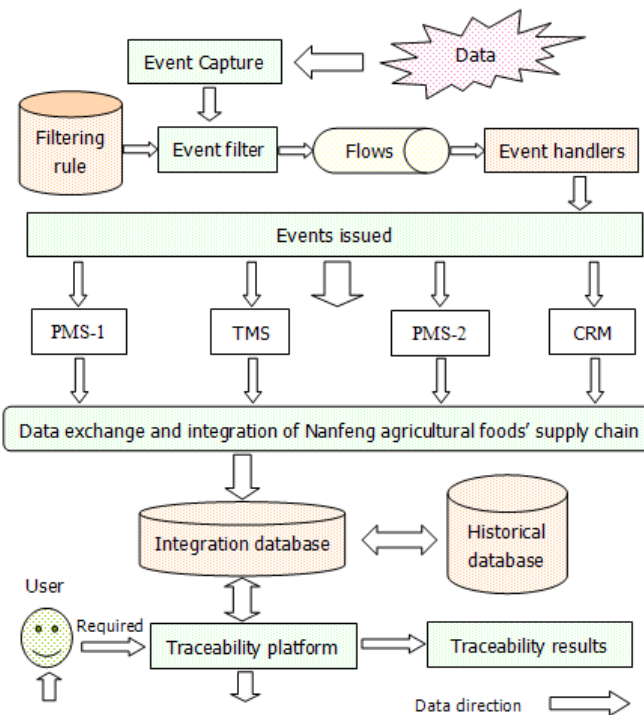


Figure 3. e-ASC dual traceability system

4) e-ASC performance evaluation system design platform

e-ASC performance evaluation system is more complex, which covers more than 200 streams factors, over 1000 evaluation parameters, Figure 4 shows e-ASC performance evaluation process and methodology of a single neuron. Research will focus on: e-ASC platform performance evaluation system design is based on four levels of SCOR model (basic process layer, layer configuration, process element layer, the implementation layer), and the top five processes (planning, purchasing, production, shipping and returns). Difficulties in the study are: to overcome the shortcomings of traditional poor operational efficiency serial BP neural network to construct BP neural network group and the introduction of e-ASC computing performance evaluation; in view of the SCOR model used for evaluation of the industrial supply chain, trying to SCOR model agricultural sector.

SCOR Process					
P	S	M	D	R	

Planning	P1	P2	P3	P4	P5	Process Category
Execution		S1-S3	M1-M3	D1-D4	S/DR1- S/DR3	
Enable	EP	ES	EM	ED	ER	

Figure 4. Individual neurons e-ascperformance evaluation methods

5. CONCLUSION

Part of the research fruits has been applied to Conghua City in Guangdong and has achieved experimental success. Main point of this paper is described as follows:

(1) The author of the "development of rural e-commerce, building a happy new countryside" a bright future full of longing and yearning, the beautiful vision of a brief description of: Through rural dual electronics market,

farmers can stay at home, use the phone or the Internet way to buy (agricultural products) sold (farm), open global market, enjoy the bustling city; The flow of information through the Internet with a double forward Mobility rural logistics integration, making the morning loaded with produce from the farm vehicle (rural → city), but also loaded with agricultural products and naturalization (cities → rural), rapid urban and rural green logistics channel, narrow the gap between urban and rural areas, rapid pull e integrated development of urban and rural.

(2) Today's Chinese government and the governments of the world are the same, to improve farmers' living standards as an important goal of the ruling, in various projects and actively promote the new rural construction, e-commerce technology in rural areas is an important direction of development. At present, e-commerce management in rural areas of low efficiency, the development of rural e-commerce is the "spark", progress is very slow. In the face of a strong competitive position in today's new rural production capacity expansion and increasing foreign agricultural products, the status quo of China's rural commerce development has constituted a new rural economic development restricting our huge bottleneck.

(3) Beautiful blueprint for achieving rural e-commerce is not only feasible but also a historical necessity! According to world-renowned IT development stage theory model - Roland model, application of e-commerce platform developed rural countryside was "prairie fire" in the spread of the stage, and the development of rural e-commerce network platform, however, a "spark" belongs to the original phase. The rapid development of China's economy today is the world's attention. Therefore, e-commerce platform for China's rural network construction from the "spark" development "prairie fire" is a historical necessity, and how to make e-commerce development of China's rural areas from the "spark" to "prairie fire" from "based on the domestic "development" out of Asia, and the world, "agricultural food safety, logistics, network security, etc. are bottlenecks. The agricultural food quality and safety incidents in recent years, domestic and international frequent and frequent in China of counterfeit and shoddy products and other agricultural farming Kēng cheat phenomenon, triggered a serious crisis of confidence in the government and enterprise, research and e-ASC-way track and trace system has been imminent!

(4) With the rapid development of new rural areas, their traditional agricultural marketing (home purchase or own dealer sales) can not meet national and global agricultural Premium product marketing requires a huge burst of seasonal production, China's new rural urgent need build a foothold in the country the world's e-ASC e-commerce platform to meet the needs of these emerging rapid rural development. However, farmers are vulnerable, e-ASC platform is required huge human, material and financial resources invested in complex systems engineering. Therefore, e-ASC platform construction and operation of the body should be government-led "government + corporate + big farmers", and services, and farmers should be the main beneficiaries. Inspection rural e-commerce success is the only criterion for whether to increase farmers' income and happiness index.

(5) To achieve a better vision of China's e-commerce development in rural areas, not just an idea, more importantly, from the economic, technical, organizational management, and social feasibility of achieving it. Due to space limitations, this paper emerging from the dual electronic market planning in rural areas, e-ASC-way tracking and tracing system design, "Internet + rural farm shop chain logistics and distribution center," shared inventory pool design, e-ASC performance evaluation system design platform four aspects of key and difficult problems required a brief analysis of key technologies.

(6) Construction to maintain the normal operation of the health of rural e-commerce platform, led by the Government to effectively design, "government + university institutes dot com + farmers, agricultural cooperatives," four farmers cultivate stable information mechanisms and rural e-commerce digital certificate authentication center can be effectively prevented or reduced the incidence of fraud network. To improve farmers

'access to the Internet and online marketing effectiveness happiness index, which, based on farmers' Cyber Space personalized data-driven model is designed to be a very interesting research topic, but should be designed to meet the practical needs of business operations personalized Cyber space there is still a long way to go.

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