

The Strategy and Countermeasures of E-Commerce Development for Chinese Retailing Enterprises

Chunhua Ju

Zhejiang Gongshang University(China), Professor

Contents

- | | |
|---|---|
| I. Introduction | IV. The strategy and countermeasures of
EC development for Chinese retailing |
| II. The current status of EC in Chinese
retailing | V. Conclusion |
| III. The analysis to the factors that impact
the EC of Chinese retailing | References |

Abstract

Chinese retailing enterprises have been facing a tough competition from foreign retail giants since China entered WTO. They must change their traditional ways of doing business and adopt new information technologies and electronic commerce in order to survive. This paper analyzes the current situation and the problems in Chinese retailing enterprises, including the cultural, the social, the technological and the environmental aspects. It gives strategies, tactics and countermeasures of E-Commerce development for Chinese retailing enterprises.

Key Words: Chinese Retailing Enterprises, Electronic Commerce, Chinese e-Commerce

I . Introduction

These years, retail industry has been playing a very important role in people's life and national economies in China. According to the latest statistics, the total retail sales in China has reached RMB 4,582.4 billion in 2003, increased 9.2% over the previous year and occupied 39.3% of the GDP (RMB 11,669.4 billion)¹⁾. It is expected that after joining WTO, open market economy and international trade will further stimulate China's economy and speed up more growth in Chinese retail industry. Retailing is one of the industries that opened to the world first after China has joined WTO. Foreign retail giants, such as Wal-Mart, Carrefour, Metro, have already entered into China's retailing markets. With advanced supply chain management methodology and advanced retail information systems, these giants are growing rapidly and threatening the survivals of Chinese traditional retailers.²⁾

In developed countries, information technologies have been paid more and more attention by retail giants. Because of this, the applications of information technologies have been getting more wide and deep in retail processes. Added with the applications of e-commerce and e-business, retailers are able to improve customer service, reduce inventory cost, extend market share, and win a competitive advantage.³⁾ Facing the penetration and tough competition from foreign retailers, Chinese retail enterprises must make significant changes in order to survive. They must be active and innovative to introduce new management concept and then to launch new management mechanism, especially the management mechanism based on information technologies. Supported by e-business and e-commerce built on information technologies, Chinese retails will be able to speedup transaction processing, to streamline the information flow, logistic flow, and financial flow among functional areas, to enhance collaboration among business partners, and finally to survive from the fierce competition.

With the high facilities and low cost of Internet, Electronic commerce grows rapidly and inevitably brings revolutionary changes into the retailing. For responding well to these changes, Chinese retailers need to research the objectives, the requirements of the electronic commerce that are suitable to Chinese retail enterprises. Primarily, analyzing the problem and identifying the strategies and the tactics about the development of EC in China's retail industry should be done. At present, however, most researches about EC in China focus on the technology aspects, such as on-line shopping, electronic data interchange (EDI),

1) <http://www.china-retailers.com.cn/news/news.php3?id=437>.

2) Chen Yu, "Chinese Retailing Fights A Close Battle Against Foreign Retailing Giants," *China Internet Weekly*, June 29th, 2004, pp.24-28; Song Dejun et al., "Retail Enterprise Must Face Challenge and Opportunity," *Journal of Harbin University of Commerce*, No.6, 2003, pp.45-49.

3) China E-Commerce Year Book Press, *China E-Commerce Year Book 2002*, January, 2002, pp.429-436.

payment and security issues, but lack of discussion and analysis of EC development strategy in China. Differing from such efforts, the objective of this paper is to provide theoretical and practical guidance to the constructions and developments of EC for the retail enterprises. In this paper, we analyze the current situation and problems of China's retail industry from multiple dimensions. Based on these analyses, strategies and tactics of EC development for China's retail industry are proposed.

The paper is organized as follows. Section 1 introduces background, motivation and objectives of the research. Section 2 describes the current status of EC in Chinese retailing. Section 3 focuses on the impacts of EC on Chinese retailing. Section 4 proposes the strategy and countermeasures based on EC for Chinese retailing to fight against international competitions. Finally, section 5 presents our conclusions and future work.

II. The current status of EC in Chinese retailing

1. The information technology infrastructure in retail

In the past, Chinese retailing was dominated by state-owned enterprises completely. They failed to pay enough attention to information technologies, so less capital was invested in. Since 1980's, however, individual retail stores have been growing supported by government. They were sensitive and responded quickly to modern technologies. Most of them started to use manually operated mechanical cash registers. From 1990's, the first generation cash registers have gradually evolved to the second generation (stand alone) and third generation (connected with networks) and gradually became popular. Base on 2002 statistics, there were about 1,000 large retail enterprises which hold over RMB 100 million annual sales, 1 millions medium retail enterprises, and 23.5 millions small retail enterprises. In 2003, the net income of the top 300 retails in China went up with an increase of 25% than last year. The rate of increasing was more than the average.⁴⁾ In all these enterprises, there were about 200 minicomputers, 120 thousand microcomputers (including some PC servers), and 100 thousand cash registers have been deployed. About 70% of the major large retail enterprises have installed computer-based information systems. Reviewing the history of the using of information technologies in Chinese retailing, we can draw out the following problems:

- 1) Unbalanced development of information infrastructure in different areas of China. Developed economic areas have put more investments in information technologies than underdeveloped areas have done and can attract more investments in future. According to the 2002 statistics, the total investment of IT in

4) <http://www.linkshop.com.cn/cgi-bin/db2www.cgi/news.d2w/newsinfo?nsnbr=17643>.

retail industry in China is RMB 30 billion. Among them, 30.5% is in North China, 28.4% is in East China, and 20.2% is in South China.

- 2) Limitation in the applications of information technologies. 80% of the information technology applications are shared by those large companies, which only count for 0.4% of the total number of retail companies.
- 3) Lack of advanced information equipments. The proportion of using new technologies and equipments were rather low. Only 50% of retail enterprises used network based third generation cash registers. 40% of the retailing used bar code readers. The use of magnetic card or IC card reading equipments is less than 40%.
- 4) Low level and narrow business applications. Among the enterprises that have used information technologies, 73% focus on the application of accounting, and 60% on inventory managements. Few applications are introduced into customer relationship analysis, sale plan making, Internet-based marketing and so on.
- 5) Inadequate and non-personalized services for customer demands. Information technologies are mainly used for internal management rather than customer relationship management. Because they fail to analyze historical data efficiently using information technologies for supporting decision-making, after services and personalized customer services which retailer can provide are pinched.
- 6) Limited ability to respond quickly to changes in consumer demand. For lack of JIT (Just-In-Time) information technologies, retailers fail to collect or draw customer demands in time and then inevitably respond with a great delay.
- 7) Lack of technicians who are familiar with not only information technology but management as well. It is difficult for technicians and retail managers to understand each other completely in the process of building an information system.
- 8) Information technologies used in financial organizations have not supported retail transactions reliably and powerfully, for example the online payment.

2. EC applications in China

The Statistics provided by CNNIC shows that: up to the end of 2003, there were 7.95 million people using the Internet. This amount was 6.1% of Chinese population. Among the people using the Internet, 46.2% considered that acquiring information was their main motives. 31.2% used online shopping. Among them, only 40.7% of buyers paid on the Internet, 35.9% paid via post offices and banks.⁵⁾ Since 52.9% of the Internet users are young people under age 24, the new generation will have significant impact on the

applications of EC.⁶⁾ In addition, according to the report from IDC, the total amount of EC transactions was RMB 6 billion in 2001 and then completed a great leap to RMB 15 billion in 2002 and to RMB 30 billion in 2003 respectively. 75 percent of the amount was contributed by B2B transactions.

Reported by ANCC (Article Numbering Center of China), by the end of 2002, 62% of retail enterprises in China have built LAN (Local Area Network), 28.8% of them publicized their product information through websites, 17.9% of them had the access to online shopping and just 3% of them implemented VMI (Vendor Management Inventory).⁷⁾ Due to the weakness of information technology infrastructure and the inadequate information system investment, however, there are very few retail enterprises developing and applying electronic commerce. Few enterprises have the operations on electronic ordering through Internet. The number of the traditional retail enterprises that touched upon EC is less than 10%. Until 2001, China has 600 on-line shops, accounting for 60 percent of the total number of e-commerce websites. Most of these on-line shops serve consumers in large cities.⁸⁾ Among them, two third are pure online web stores. Less than one-third has traditional retail services. In 2003, the sales volume on the Internet was RMB 20 billion, only 0.44% of the total amount of the retail consumables.

The current development of several typical retail information technologies in China including POS, CRM, ERP, SCM and Web Store is shown as follow:

- 1) POS has been popular in retail enterprises, but most of them are used just for check-out. The analysis on POS data was neglected.
- 2) ERP was used in manufacturing firstly, so it focused on manufacturing workflow. ERPs, which have been built specially for internal management in retail enterprises, have still been immature.
- 3) SCM has got its booming in large-sized and middle-sized retailers. By the end of 2002, they occupied over 90% of the whole application of SCM. Now, most of retailers focus on how to speed up and streamline SCM.
- 4) Large-sized retailers have gained great benefits from CRM. But medium-sized and small-sized retailers are in the majority in China and fail to obtain sufficient historical data to support analysis of customer relationship. Because of this, local CRM suppliers pay more attention to the exploitation of CRM localized.
- 5) Due to the weakness of credit system, customers just can order online and then check out offline in

5) China Internet Network Information Centre, *The 13th Survey Report*, February 6th, 2004, p.5, p.13 and p.20.

6) China Internet Network Information Centre, *Analysis Report on the 13th Survey Report*, May 26th, 2004, p.2; Li Xiaolei, "The Inchoation of Sustainable Development Retail Market Depends on Capital in 2003," *China Internet Weekly*, December 29th, 2003, pp.28-29.

7) Gong Bingzheng, "The current development and trend of EC in China," *Science Technology and Industry*, Vol.3, 2003, p.17.

8) http://english.people.com.cn/english/200104/09/eng20010409_67208.html.

Web Stores.

3. The EC application in foreign retailers

In developed countries, the retail enterprises have used many advanced information systems including EDI (Electronic Data Interchange), ERP (Enterprise Resource Planning), SCM (Supply Chain Management), CRM (Customer Relationship Management) and EC (Electronic Commerce) etc. Till to the end of 2003, the rate of the application of technologies, such as POS and data processing, had arrived to 100% in USA and in some developed countries in Europe, nearly 10% of the American retail enterprises had applied technologies of data warehouses in the MIS.

At present, over 80% traditional enterprises in the developed countries have built their own websites to provide services that related to the operation and managements. The websites are linked with the back-end systems such as ERP, SCM, and CRM to form an integrated e-business. According to the data from the USA Department of Commerce, in 2003, the total retail sales on the Internet was up to US\$ 93 billion, an increase of 27% of 2002, faster than the total retail sales growth which was only about 4%. The online sales however, were still very low, only count for 1.0% of the total retail sales in 2001.

Wal-Mart, the retail giant, has always been the pioneer of pursuing EC and IT in order to be the winner in global retail competition. In 2003, the earning of Wal-Mart was up to US\$260 billion.⁹⁾ That made it the top in 500 biggest enterprises in the world. Wal-Mart's success was because its managers always keep up with the development of EC technologies to provide best service in lowest price. In October of 2000, Wal-Mart cooperated with America On Line and provided them own services of network connections. Now, Wal-Mart.com is a famous website. It can provides customers with secure online payment based SSL protocol and express delivery. Products sold in Wal-Mart.com are nearly not available at Wal-Mart's chain stores. Wal-Mart.com also provides a platform for worldwide customers to communicate with Wal-Mart and by collecting feedbacks and requirement from customers Wal-Mart can analyze and then make decision about how to improve customer service. Wal-Mart's Teradata Warehouse can support CRM and decision-making powerfully. Retail Link, which is the platform for Wal-Mart to communicate with suppliers, is another state-of-the-art information system. With the powerful Retail Link, Wal-Mart can build the cooperative relationship with suppliers by implementing CPFR (Collaborative Planning Forecasting and Replenishment).

Now, building information alliances among big retail enterprises is an important trend. In 2000, the WRE (World Retail Exchange) was built by eleven big chain groups such as K-Mart, Tesco and the GNX

9) Wal-Mart, *Wal-Mart Annual Report 2004*, 2004, p.33.

website (Global-NetXchange) was built by some shopkeepers including Sears, Carrefour, Sainsbury, Metro. Their aim is to form the network connecting the whole world and realize united stocks, cost savings, market controls, the benefit to the maximum.

III. The analysis to the factors that impact the EC of Chinese retailing

According to the above presentations to the status of Chinese retailing EC, the following will deeply discuss and analyze the reason of the factors, get a conclusion of the factors that impact the retailing EC of China.

1. The factors of culture

(1) Chinese retailing remains the characters of traditional cultures and the senses of appreciating to merchandise. It pays good attention to characteristics of management and features of commodities. And Chinese traditional retailing promotes the enterprise culture that has the feature of specialized. The direct communications among people are emphasized in traditional retailing. So, every area has their own favorite stores that have a long history and has its distinct feature. These old stores have become a part of Chinese cultures. EC lacks this kind of culture and its method is easy to conflict with the traditional retailing in the ideas of managements.

(2) Chinese retailing prevails the cultures that one should undertake his father's business and do businesses on a small scale. So most of the retail enterprises have characters of family. China towns in foreign countries are just an example of this kind of cultures.

(3) The population of China is more than 1.3 billion and the distributions are dense. In addition, vehicles are so lacking that most retail stores have to be opened at the city center or in the areas where residents centralize and traffic is convenient.

(4) In China, people always think that businessmen are dishonest. Influenced by this thought, it is difficult to build believable relationships between customers and businessmen. Before they pay for what they want, customers are often watchful to the businessmen. Presently, both customers and businessmen prefer to use cashes to trade. Transactions using bankcards is only about 10%.¹⁰⁾

10) China Internet Network Information Centre, "14th Statistical Survey on the Internet Development in China," February 6th,

(5) In the traditional mentalities, trading has always been discriminated. So, it is difficult to attract competent persons who have the knowledge of information technologies and EC. Now, ordinarily, the employees in retailing have a lower education and a lower salary than that people have in other industries.

(6) Traditional “cash and carry” culture held by Chinese people result in the incredulous of shopping online. According to CNNIC, Only 34 percent of Internet users in China are currently purchasing goods and services on-line.

(7) In daily life, Chinese people have formed rooted consuming habits, especially housewives, and they prefer to carefully select and try before they buy. But the virtual nature of Internet causes low trust and loyalty to e-commerce. Most people use Internet for information and communication but not purchase.

2. The factors of management

(1) Now, in Chinese, many retail enterprises run in a pattern of contract managements. They transfer rights of management to a lower level—commodity departments. Commodity departments can independently stock, manage and check to finish their tasks distributed by their superior. But this kind of management systems and models is not fit for requirements of EC because of the decentralization of resource.

(2) Reconstruction and amalgamation of traditional retailing industry are essential for adapting network socialization and pushing the step of E-commerce. However, only considering employee management, state retailing enterprises have a great difficulty in regrouping employee for adapting to new EC applications. Unemployment and re-employment have to be considered by manager team. To some degree, this can block EC's advance.

(3) There are wide gaps in technology and management. In general, company founders who have a management background think EC based on the management methodology without considering the feasibility technically. In the same way, company founders who have an information technology background typically have little understanding of the actual requirements of management. How to combine technology with management seamlessly is the most critical question faced not only technicians but managers as well.

(4) The organizational structure of local retailing enterprises in China holds traditional up-to-down hierarchies. This makes management cycle time-consuming and decision making over-centralized.

(5) There are many small-sized retailers in China and they are self-invested generally. Being more cautious to make a large investment in a new technology, these decision-makers are conservative to new technologies and hold pessimistic attitudes towards EC.

(6) Many managers of retailing hold a “big and all-sized” or “small but all-sized” concept. In spite of self-conditions of business, managers who take optimistic attitudes towards EC always attempt to achieve the whole-body’s EC. Driven by this attempt, they fail to orient the real needs of their enterprises with neglecting a fact that resources are limited.

(7) Influenced by the traditional mentalities and the level of being educated, some Chinese decision-makers and managers lack the understanding to new information technologies like EC. They think manual and experiential management is enough to running their enterprise and EC is expensive and not necessary.

3. The factors of information and technologies

(1) At present, the foundations of information technology applications are not well grounded. People in retailing have not put enough focuses on information. From the era of planned economy on, the technology investments from the government to retailing has been much less than that to other industries such as electronic industry and machine industry etc. So the lack of technologies has blocked the large-scaled application of EC in retailing.

(2) Local software and hardware suppliers fail to provide retailing with reliable EC technologies and applications. Software and hardware introduced from abroad face a problem of localization. In addition, those retailers who have used EC technologies don’t consider the upgradeable space of EC applications so that technologies are not upgraded up-to-dately.

(3) Large-sized retailers fall over themselves for investing in productivity-enhancing technology such as B2B e-commerce and have invested few in B2C. So, ERP, EDI, and SCM have been developing overwhelming CRM, Sale-online. In most medium-sized retailing enterprises, office automation continues to predominate and few retailers are using information technology for enterprise resource management, client-based analysis, or supply-chain management.

(4) Obviously, information technologies have been into application to some extends, but there are some problems that let retailers hang back: technology is still not mature. For example, network technology is only to march toward the first step that communication and interconnection with suppliers and customers, but that transmit speed and stability are not satisfied enough.

(5) In Chinese retailing, bills, codes and report forms are not standardized. Companies have their own formats that differ from each other. And the operation processes are also different. These differences make the difficulty of information exchange between enterprises and between the internal and the external.

(6) Technologies of information securities and secrecies have not been emphasized in Chinese retailing. In

addition, because of absences of regulations and standards in information communications, there are not powerful laws specialized in punishing deceivers for cheating in product online and filching personal information.

4. The factors of environment

1) Policy environment

Central government has launched a nationwide information campaign to develop a legal framework for e-commerce. Local governments have made progress in applying information technologies. Since 2002, Central government has revised and constituted to encourage and protect the development of EC. In addition, Chinese government has also committed to liberalize rules governing foreign investment in telecommunications and other restrictions on market access relevant to e-commerce and Internet.

Nevertheless, the government has not paid enough attention to EC in retailing and has not balanced the developments among different industries and failed to institute legal, regulatory and policy initiatives in retailing.

2) Network environment

Wide Band, Wireless LAN, and Mobile CDMA have been developing rapidly and Internet keeps on booming. Because of the upgrade in Network equipments, information exchange between retailers and suppliers more rapid and convenient. With the number of mobile phone users in China growing at high speed per year, retails began advertising their products, promotion plan and retail news to mobile users. The network infrastructure, however, is still relatively insufficient, and access is also limited heavily, and strict government regulation also limits Internet access. For retailing, the limitation in network speed makes a big delay for confirming a credit card during payment online.

3) Logistic environment

Since 2002, the government of China has put more efforts into logistic establishment, logistic information platform and logistic policy for building a modern logistic environment. Few large-sized retailers have built large-scale logistic centers or distribution centers to accelerate the circle of supply chain. But most of them are running at high cost comparing to the profit brought from logistic centers. Information technologies applied in logistic center can't be migrated seamlessly among different information systems of retailers. Third

Party Logistic has been developing for providing delivery service to small-sized retailers.

4) Payment environment

Chinese web banks have entered an accelerating stage since 2000. Rules and regulations have been drawn up for running web banks securely. Especially, EC services get available through Internet except traditional banking services. But payment online is still in difficulty. For B2B, there are no operational sockets among commercial banks. That is to say, cross-banks payment is not available. For B2C, credit card payments online are still be a risk for customers.

5) Security environment

From the point of view of retailing, security problems include business secrets, identification of customer and certificate of transaction, customer privacy and so on. Internet Security Law has been drawn up for guaranteeing information security in telecom and e-commerce. Security technologies like digital signature, PKI/CA, SSL, Anti-Virus have launch into B2B applications, but

6) Financial environment

On July 2000, the Task force appointed to look into possibility of taxes on electronic transactions in an effort to boost government's finances. However, China has refrained from imposing duties on e-commerce. China likely to continue this policy while implementing WTO-compatible laws and trade practices.

However, online banking services in China are currently focused almost exclusively on the B2B market. The lack of Internet security for personal banking services is one reason why online banking fails to support retail market powerfully.

7) Application environment

Only with a large Internet user base, will E-Commerce become prosperous in China. Not only townsmen but also countrymen have higher request for improving living standard, especially for commodities. This provides a wider space for retailers to expand their business and perfect their services using EC. At the same time, more and more retailers from urban and rural regions are using the Internet to do business. However, there are some roadblocks to delay the progress in applications of EC. Above all, China is still primarily a cash-based society where people rarely use credit cards so that the applications of B2C are limited to some degree. In addition, for university students who are the most zealous supporters of online

shopping, it is difficult to apply for credit cards without employment, enough income and social status.

8) Standardization environment

The application of modern information technologies should comply with the international standards. Standardization Organization has built three sets of standards for EC, including Information Security Standard, Security Technologies and Standard, E-Commerce Standard. However, at the present time, our country has still lagged in the constitution of laws and regulations and standards those are relevant to EC. Variance of the industry's standard and confusion of the interfaces are the barriers to EC.

IV. The strategy and countermeasures of EC development for Chinese retailing

1. Strategy processes for the EC development of Chinese retailing

With China's joining in the WTO, Chinese retail enterprises are faced with both opportunities and challenges. It is a momentous problem to each decision maker how retail enterprises apply high and new technologies like EC, how they can survive and make profits.

(1) Establishing the strategy of innovation conceptions, regulating enterprises' structures and developing quick chain mode

The innovations about retailing includes: trade conceptions and mode innovations, system innovations, management innovations, regulating the structures in medium and small enterprises, developing the enterprises who are competitive and have distinguishing features, closing or annexing incapable enterprises, developing enterprises in a multi-format way, employing EC and ordering on telephone.

(2) Building the primary strategies focused on sciences and technologies, employing sciences and technologies from MIS to EC

Retail enterprises must transform their traditional trade mode rapidly and focus on the development of high-level sciences and technologies. They should build new mechanisms of technical innovations, take advantage of information networks, intensify the application of EC, realize sale on-line and logistic distributions and build service systems of consumption.

(3) Making sure the development strategies of internationalization, unfolding the global digitization trade

It is evident that the development of economy will be global. Enterprises that joined in the WTO are

bound to participate in competitions for international markets. They should think over everything from the view of strategies of internationalization. Chinese retailing must transform their traditional management conceptions to global and international management conceptions. They ought to learn international organization criterions of chain managements. Then, standing on the level of international economy, Chinese retailing should gradually constitute their development strategies and participate in the competitions for sharing international market shares.

(4) Establishing the strategies led by information and focusing on information mine

EC that has not limitations of areas and time is led by information. It can integrate information flow, capital flow and material flow. As a retail enterprise, it must pay attention to the employment of EC and focus on information's collection, management, mining and delivery. Enterprise should think much of the influence to decisions based on information.

(5) Establishing the strategies of the innovation of systems, paying attention to the regulation of the structures of enterprises

The strategies of system innovations are the realization of system innovations in enterprises. The innovations include property right system transformation and the change of management system and administration system. The urgent affairs of Chinese retailing are system innovations and mechanism innovations. Retailing should reconstruct and reorganize all kinds of retail companies in a way of modern enterprise system.

2. Countermeasures for the EC development of Chines retailing

Retail enterprises should have a clear idea about the tactical countermeasures to implement EC. That is as following:

(1) Reconstructions of small retail stores should be accelerated, especially family stores. Chain enterprises having some scale and modern managements should be the hardcore of the retailing constructions and should be supported heavily by the government.

(2) The application of networks, MIS (including internal MIS and connections with Internet/Van) should be improved and consummated, because they are the application foundations of modern information technologies. In addition, information technologies used in MIS are more mature and hold more high stabilities which are necessary to develop and apply new technologies.

(3) Steered by government, between retail companies or between different industries, the information exchanges should be standardized. The standards include communication standards, exchange receipt standard sets, data format standard sets and the standard sets of relevant codes etc. Complying with these standards,

retailing can realize electronic managements of business affairs in a safe way.

(4) Large retail enterprises that have enough capitals and good reputations can build their own websites to develop EC services and penetrate into the large market of Internet consumer. Medium and small companies can turn to special EC companies, such as ICP and ISP, to realize EC services for sharing the Internet consumer market.

(5) EOS (electronic ordering system) based on B2B is a turning point to retail companies using EC. It provides uniform exchange standards and software to help the automatic ordering between providers and companies. During the ninth five-year planning in China, Shanghai Lianhua supermarket had used EOS successfully. Now, there is not any technology trouble to generalize EOS, but the collaborations provided by government are essential.

(6) Change SCM from inventory-oriented to requirement-oriented. For achieving this change, JIT (Just-In-Time) technology should be embedded in SCM for responding to customer requirements in time. On the other hand, SCM should be acute to market fluctuate for regulating inventory level and marketing plan in time.

(7) Collaborated and led by the government, companies can found information alliances in retailing. Information alliances can compete with foreign information alliance and break the electronic business barriers made by foreign information alliances. And the alliance also can make companies in it acquire more benefits and spend less money when they deal.

(8) Retailing should build logistic delivery systems according to different distribution modes (including integration distribution mode, combined distribution mode etc). These kinds of systems can realize commodities distributions to sub chain stores and to customers.

(9) With developments of information technologies, the renovations of software and that of hardware develop at a high speed, the government should lead actively and encourage the third party business networks and data service centers which can provide information services to retail enterprises, make EC services, information transaction efficient, offer the operations (ordering on line, consulting, trading, balancing and so on) on a high level.

(10) For those small-sized retailers, which are too weak to counteract the fierce competition by themselves, should consider the strategy to enter into alliance with other small-sized retailers or to be attached to a large-sized retailer. Only by this way, can a small retailer survive from being impoverished.

V. Conclusion

Now, information technologies are developing rapidly. It can be seen that EC will have a wide application in Chinese retailing. With international retailing giants entering Chinese markets and expanding rapidly, Chinese retailing is facing a lot of challenges. For Chinese retailers, to develop EC on a large scale has been possible technologically and the important thing should be done is to turn mind into EC system. Fighting against these challenges, firstly, Chinese retailing must be aware of the difficulties they will face and look on it as chances of winning more profits also. Secondly, they should know significances of the application of EC and devote themselves into the innovation of EC-based. Thirdly, a project team including technicians and managers should be organized, in which all members are open-minded and do with team spirit. Then, this collaborative team ought to think over and make certain what applications are necessary and most profitable for their enterprises. That means to find the breakthrough in information system. Finally, a project plan can be implemented practicably should come into an agreement. In summary, only with the power of EC, can a retailer survive from the fierce competition and win the final victory.

References

- Bingzheng, Gong, "The current development and trend of Computer Applications in China," *Science Technology and Industry*, Vol.3, 2003.
- Burns, Kathryn Bye, Helene Enright, Julie Falstad Hayes, Kathleen Mclaughlin, and Shi, Christiana, "The art and science of retail renewal," *The McKinsey Quarterly*, No.2, 1997.
- China E-Commerce Year Book Press, *China E-Commerce Year Book 2002*, January, 2002.
- China Internet Network Information Centre, "The 13th Survey Report," February 6th, 2004.
- _____, "14th Statistical Survey on the Internet Development in China," February 6th, 2004.
- _____, "Analysis Report on the 13th Survey," May 26th, 2004.
- Dejun, Song et al., "Retail Enterprise Must Face Challenge and Opportunity," *Journal of Harbin University of Commerce*, No.6, 2003.
- Ernst, David and Tammy Halevy, "A future for E-alliance," *The McKinsey Quarterly*, 2001.
- Mazn, Cristina, "Electronic Commerce," *Consumer Search and Retailing Cost Reduction*, No.11, 2000.
- Palmer, Jonathan W., "Electronic commerce in retailing: Differences across retail formats," *The Information*

Society, Vol.13, No.1, 1997.

Wal-Mart, *Wal-Mart Annual Report 2004*, 2004.

Xiaolei, Li, "The Inchoation of Sustainable Development Retail Market Depends on Capital in 2003," *China Internet Weekly*, December 29th, 2003.

Yu, Chen, "Chinese Retailing Fights A Close Battle Against Foreign Retailing Giants," *China Internet Weekly*, June 29th, 2004.

<http://www.china-retailers.com.cn/news/news.php3?id=437>.

<http://www.linkshop.com.cn/cgi-bin/db2www.cgi/news.d2w/newsinfo?nsnbr=17643>.

Http://english.people.com.cn/english/200104/09/eng20010409_67208.html.