

Saimaa University of Applied Sciences  
Faculty of Business Administration Lappeenranta  
Degree Programme in International Business

Xu Miaoer

# **Distribution Logistics and Logistics Customer Services of B2C E-tailing Industry in the Chinese Market**

Thesis 2017

## **Abstract**

Xu Miaoer

Distribution logistics and logistics customer services of B2C e-tailing industry in the Chinese market, 58 pages, 2 appendices

Saimaa University of Applied Sciences

Faculty of Business Administration Lappeenranta

Degree Programme in International Business

Thesis 2017

Instructors: Ms Leena Laari-Muinonen, Senior Lecture, Saimaa University of Applied Sciences

The objective of the research was to find out on which important factors B2C e-tailing companies should focus on by analysing the most influential elements of customer's purchasing decision-making.

The data for the theory aspect were collected by reviewing scientific journals, professional books, articles and news from the Internet and previous theses in the similar research filed. The empirical research was conducted by both quantitative and qualitative methods. The quantitative research included a structured questionnaire with 11 questions sent to the Chinese customers in Chinese. The English version is also attached in the appendix. There were 107 respondents, which exceed the planned sample size 100. The qualitative research included two semi-structured interviews with five questions. The goal was to understand details of customer's online shopping experience.

The results of this thesis indicate that B2C e-tailing company should be focused on the aspects of time, costs, reverse logistics, especially product return, product quality and information sharing to design and manage its distribution logistics. The electronic technology is updated rapidly so that e-commerce market is changing every time. The renewal of the study in this field is meaningful to research in different environment and market.

Keywords: B2C E-tailing Industry, Distribution Logistics, Logistics Customer Services, Chinese Market

## Table of contents

Abbreviations .....	5
1 Introduction.....	6
1.1 Topic backgrounds .....	6
1.2 Objectives of the study and research questions .....	7
1.3 Delimitations of the study .....	8
1.4 Research method .....	8
2 B2C E-retailing industry in China.....	9
2.1 B2C E-tailing model .....	9
2.2 Current situation .....	9
2.3 Chinese B2C e-tailing websites .....	11
2.3.1 Models.....	11
2.3.2 Competition .....	12
2.4 PEST analysis.....	13
2.4.1 Political environment .....	13
2.4.2 Economic environment.....	14
2.4.3 Social environment.....	14
2.4.4 Technological environment.....	15
2.5 Facing problems .....	16
3 Distribution logistics and customer services .....	16
3.1 Logistics and supply chains .....	16
3.1.1 Difference between logistics and supply chain .....	16
3.1.2 The evolution of retail logistics .....	17
3.2 Distribution logistics .....	19
3.2.1 What is distribution logistics .....	19
3.2.2 Key elements in distribution logistics chain .....	19
3.2.3 Distribution networks.....	21
3.2.4 E-logistics and E-distribution channel.....	21
3.2.5 E-fulfilment .....	23
3.2.6 E-fulfillment and E-distribution logistics management .....	25
3.2.7 Last-mile delivery .....	28
4 Logistics customer services.....	29
4.1 Importance of customer service .....	29
4.2 Key elements of logistics customer services.....	30
4.3 Customer satisfaction and loyalty .....	30
4.4 Customer services under e-commerce .....	31
5 The successful example analysis: The logistics effectiveness and customer service of Chinese B2C e-tailing websites .....	32
5.1 Backgrounds of Vipshop .....	32
5.2 Distribution logistics of Vipshop .....	33
6 Empirical study .....	36
6.1 Sampling, data collection and data analysis .....	37
6.2 Quantitative research.....	37
6.3 Qualitative research.....	43
7 Conclusion and discussion .....	45
7.1 Conclusion .....	45
7.2 Discussion .....	46

Figures .....47  
References .....48

**Appendices**

Appendix A  
Appendix B

Questionnaire in English  
Questionnaire in Chinese

## **Abbreviations**

B2A – Business to Administration

B2B – Business to Business

B2C – Business to Customer

C2C – Customer to Customer

C2B – Customer to Business

CECRC - China Electronic Commerce Research Centre

CNNIC China Internet Network Information Centre

CNY – China Yuan

GDP- Gross Domestic Product

IOT - Internet of Things

PC - Personal Computer

PDSQ - Physical Distribution Service Quality

SKU - Stock Keeping Unit

# 1 Introduction

## 1.1 Topic backgrounds

Nowadays, e-commerce is growing up to a mainstream mode of shopping in the world, especially in China. People in present modern life concentrate more on time-efficient services and convenient ways of shopping, which is the reason for huge transaction amount of e-commerce. China was not the most successful at the beginning when the e-commerce was getting applied. However, by 2016, the Chinese e-commerce market had already occupied the largest share in the world (Vaast 2017). E-commerce industry is now facing a boom-period in the Chinese market because of unique characteristics: large population, high-speed life mode, high level of purchasing power, relatively mature examples in foreign countries (such as Amazon), etc.

There are many different types of e-tailing business: B2B, B2C, C2C, C2B, B2A, etc. (Bloomidea 2014). In China, there are 4 typical companies: Alibaba (B2B), Tabao/Tmall (C2C & B2C), Vipshop (B2C) and JD (B2C). A different business model will implement corresponding supply chain design. All of them have attractive supply chain and distribution logistics towards to final consumers based on their business mode to gain more customer satisfaction and customer value.

In recent years, the importance of distribution and logistics control has been recognized and implemented into varies industries. Distribution logistics is in the downstream of the whole supply chain and logistics process, connecting the final customers and retailers. Not like the traditional retailing business mode, under the electronic commerce environment, distribution logistics process and focusing points have been revolutionized in many aspects: the way goods are delivered, warehousing building, inventory management, customer services methods and so on. High level of order flexibility, time-focused delivery, effectiveness of inventory, convenience of payment and reverse logistics are demanded by the customers.

In the current electronic economic environment, distribution and logistics design and management become the key competitiveness for the company. By apply-

ing the use of the Internet and other electronic controlling technology, the activities of production, ordering, warehousing, delivering and customer serving based on storage, analysis and delivery of data will be more accurate, efficient and sustainable.

The information flow in supply chain process breaks the limitation of time and space that information can be directly shared among customers, suppliers, sub-contractors, vendors, producers, etc.

Though China is one of the top e-commerce retailing countries, its supply chain still faces many challenges and problems as a “young” management perception. In order to attach future development of e-tailing industry, understanding current e-commerce situation and the implementation of distribution logistics is really important. It is well known that the ultimate purpose of business is aimed of final customers. It can be prospected that more and more new companies will be engaged in e-tailing industry in China. Understanding the customer preferences in order to build a more customer-preferred distribution line is important for new entrants to satisfy their consumers.

## **1.2 Objectives of the study and research questions**

The main objective of this report is to understand of which elements of customer services influence a customer’s purchasing decision most and then give a suggestion to new and young B2C e-tailing companies about what points in distribution logistics should be focused on most in order to offer a better customer services. To reach the final goal, some more detailed tasks should be implemented: analysing the current condition of the current B2C e-tailing industry in China; studying the maturely successful distribution logistics of famous B2C e-tailing companies in China; and then understanding the current online shoppers’ demand and concerned points about customer service.

Therefore, the primary research question is:

Which points in the distribution logistics’ process a company should focus on by analysing the most influential factors of customer’s purchasing-decision making in Chinese B2C e-tailing industry?

In the way to achieve the main objective, the sub research questions will support the study:

How the current B2C e-tailing situation in China looks like?

What is the current situation of distribution logistics in e-commerce in China?

How important is distribution logistics and customer service?

How the current logistics customer service in e-tailing industry looks like?

### **1.3 Delimitations of the study**

The research focuses on the supply chains and logistics distributions optimizing in B2C e-tailing in Chinese market, and does not intend to analyze those in other sectors of business and other markets. The survey mainly focuses on analyzing the current situation based on the fact of large e-tailing company and B2C e-tailing company, and will not focus on other types of e-commerce business.

China now has a population of 1.38 billion (Worldometers 2017). In this research, randomly selected sample method makes it possible to get the aimed results by choosing minimum 100 samples. However, compared with such large population and online shoppers amount, minimum 100 samples means relatively limited into some areas. Besides of the sample size has limitation, sample type also has: in the thesis, sample is chosen randomly and is not focusing on just only one e-tailing websites' customers.

### **1.4 Research method**

To achieve the objectives, both theoretical and empirical study will be used. Theoretical part will give definition to logistics and supply chain, e-tailing industry, distribution logistics and logistics customer services and distribution logistics integration. Analysis of the current situation of distribution logistics development and how to get an effective and customer-preferred distribution logistics will be mainly use literature review and successful example company analysis.

Quantitative and qualitative research method will be used in the thesis. For quantitative research, one questionnaire for end-customers of some big online



retailing companies will be used to collecting data for understanding the most influential elements for customers' purchase decision making. In the survey, current purchasing situation, customer satisfaction, most likely aspects of customer for choosing the e-tailing company (time, communication, refund, etc.) and so on will be examined.

For qualitative research, two semi-constructed interviews will be made.

In the thesis, data were analysed by different types of methods depending on different data collection ways. For questionnaire survey, quantitative data analysis method will be used. Excel is the main tool to record and analyse the data. Different types of figures will be used to calculate its percentage, amounts, etc.

## **2 B2C E-retailing industry in China**

### **2.1 B2C E-tailing model**

B2C is the abbreviation of "Business to Customer". Considering different nature of the transaction, Turban and King generalize its classification. There are some common known types: B2B (business to business), B2C, B2B2C (business-business-customer), C2B (customer-business), C2C (customer-customer), and mobile commerce (Turban & King 2007, p. 7). B2C E-tailing is one of the branches of the electronic retailing industry, which can be understood as electronic retailing under B2C (business to customer) market. The B2C E-tailing is a bilateral commercial activity between the business and final customer (Techopedia). It is generated from the development of the Internet technology, which providing a new and convenient shopping method or emancipating buyers from insignificant time consumption under "brick and mortar" shopping way.

### **2.2 Current situation**

With the increase of the Internet penetration range and wider application of computer networks to both daily and business life, the revenue of e-commerce has witnessed a continually and steadily growth from 2011 and 2015 with the share of e-commerce GDP (gross domestic product) 1.34% in year 2011 to 3.11% in year 2015 globally. Asia-Pacific region owns the largest share of e-

GDP (4.48%) around the all over the world with 23,564 billion dollars GDP at market prices, though it has less than 39% Internet access per region, which is lower than the worldwide average rate of 45%. E-shopping has become a “fashion” way for people. And in 2015, nearly 26% (1436 million) of the total amount of people in the world will purchase goods via Internet. (Ecommerce Foundation 2016.)

China is an e-commerce leading country with the top one position with 7.05% in the share of e-commerce in GDP in 2015 (Ecommerce Foundation 2016). In 2016, the total amount of transaction of e-tailing industry is 4.97 billion CNY and the B2C e-tailing market generates over 2.7 trillion CNY revenues with the increasing trend of 36.0% growth rate compared with that last year. About the transaction amount, the growth rate is slightly decreased from 2013 (78.6%) to 2016 (36.0%), however, there is still a continually rising trend of the currency amount of transaction volume of B2C e-tailing market. the details are shown in the Figure 1 as following. (Analysys 2017.)

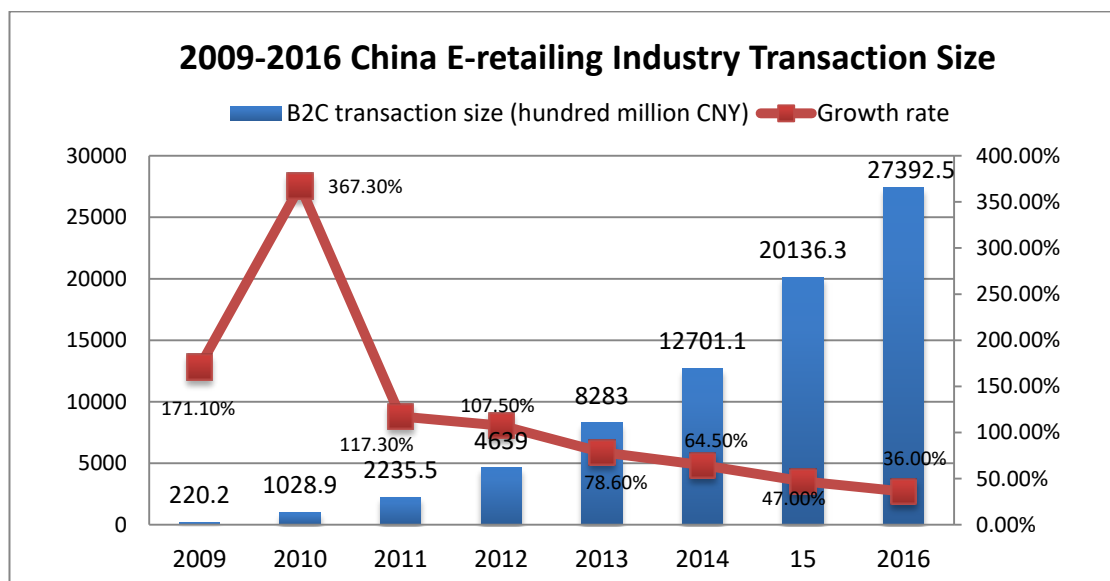


Figure 1. 2009-2016 China B2C E-retailing Industry Transaction Size (Analysys 2017)

In the retail industry in e-commerce focusing towards to final customers, there are two types of markets: B2C (business to customers) and C2C (customers to customers) market. Since the 2015, the market share of B2C exceeded that of

C2C market with the market share of 52.5%. In year 2016, a larger market share was occupied by B2C market with the percentage of 55.13%. (Analysys 2017.)

## **2.3 Chinese B2C e-tailing websites**

### **2.3.1 Models**

Based on different business patterns and distribution channels, B2C e-tailing websites can be divided into three typical models: direct marketing, pure-play e-tailers and click-and-mortar retailers (Turban & King 2003, p. 98). Based on the Chinese business backgrounds, these three types can be also titled as: self-operated model, third-party platform model (Shi, & Yang & Yan & Tian 2017) and manufacture/seller self-built platform (Analysys 2017).

In the first classification, self-operated model, the retailer builds an online shopping platform in order to distribute its products to the final customers. Under this model, retailers always take the responsibility of central procurement, product display, on-line transaction, delivering goods with own logistics system, communication management and reverse logistics. In China, there are some representative websites belong to this model: VIP shop, JingDong, Suning, and Yihaoding. (Shi et al. 2017.)

The most representative B2C e-tailing website in the second classification (third-party platform model) is Taobao and Tmall. An online selling platform and supports for transaction in the field of technology, advertising, online shop design, etc. will be provided to the sellers who are participate in doing business in the platform (Shi et al. 2017).

The last model is derived from the “brick and mortar” business model that manufactures or companies apply the Internet technology to build an online selling platform to distribute its products. Apple is one leading company pertaining to this third model. (Analysys 2017.)

### 2.3.2 Competition

China owns its typical advantages to develop B2C e-tailing industry: large population, increasing purchasing power, relative lower labor price, well-developed transportation system, high demand of e-shopping, etc. Different websites would have different market positioning and business strategy. To illustrate, Tmall, the leading B2C e-tailing platform in China, provides customers quality goods by involving different brands merchant storefront (Tmall.com). Vipshop is another famous website, and it aims to provide the best discount for famous brands (Vipshop.com). In Figure 2 below, the general situation about the market share of online shopping websites are presented.

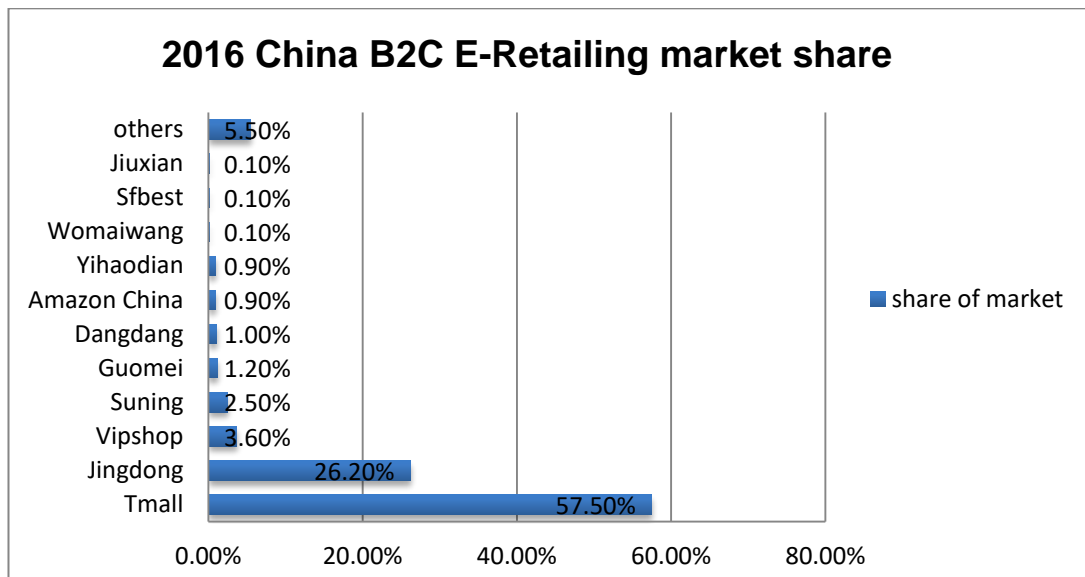


Figure 2. 2016 China B2C E-tailing Market Share (Analysys 2017)

There are four dominate websites that own nearly 90% share of market: Tmall, JingDong, Vipshop and Suning. Tmall owns the absolute predominance among all the websites, which occupies more than half of the B2C e-tailing market. Jingdong is the second largest website which owns more than 22 percentages of market shares than the third position website Vipshop (3.6%). However, Vipshop increased its market occupation percentage from 2.9% in 2015. (Analysys 2017.)

## **2.4 PEST analysis**

A positive and stable macro environment in the political, economic, social and technology field could provide an advantageous support for development. In China, B2C e-tailing industry has been facing a stable and positive growth in past decades, which has the close affinity with the support from political, economic, social and technological environment. Thus, it is meaningful to analyze the macro-environment by using PEST analysis method. PEST analysis method is understanding objective from four different points of view: political (P), environment (E), social (S) and technology (T). PEST can help have a deeper and comprehensive understanding of the objective.

### **2.4.1 Political environment**

In 2015, the State Council of People's Republic of China proposed the guideline about "Internet Plus" promoting action. "Internet plus" is a business pattern innovation and a new pattern under the wider application of Internet. "Internet plus" is the business pattern that integrates Internet with different types of industries, such as health-care, medical industry, tourism, etc. (Tech.hexun 2016.) It is not directly combining Internet and different industries, but is a comprehensive innovation from the root of thoughts and concepts. By using the optimization and centralization of resources during the transaction from the Internet technology, the traditional industries type will be changed and optimized. (Tisi 2015.)

Under the "Internet plus" concept, three businesses face the chance to grow: cross-border business in e-commerce; rural arrears e-commerce, mobile e-commerce with the combination of on-line and off-line e-tailing (Linkshop 2016).

Initially, Cross-border business began to grow up. The statistics from CECRC (China Electronic Commerce Research Center) show that in 2015, the amount of cross-border transaction was 5.4 billion CNY, which rose 28.5% from year 2014 (100ec 2016). Many B2C e-tailing websites started their cross-border business to grab market share.

The next one is rural area e-commerce. In recent years, rural market shows its significant potential value when the urban market is approach to saturation (Linkshop 2016).

The last one is Mobile e-commerce. People pursue the feature of convenience and mobility, which allows the extensive use and cover range of the application of intelligent terminal (IT) such as smartphone, pad, smart watch, etc. in the daily life. In the first half of year of 2016, the transaction volume is more than 1.6 billion CNY occupying 69.4% transaction amount compared with transaction done in PC (Personal computer) and it increased dramatically 90.8% from 0.8 billion CNY in the first half year of 2015 (100ec 2016).

#### **2.4.2 Economic environment**

National Bureau of Statistic of China indicates that in recent ten years, China GDP has a continuous and stable increase. In 2017 Q1 (first quarter), the GDP is 18 billion CNY with the growth of 11.8% when comparing with the corresponding period in 2016. In 2016, the annual GDP has been growing 7.9% with 74.4 billion CNY. People's purchasing power also has increased. Those conditions offer a growth chance for e-commerce in B2C market. (National Bureau of Statistic of China 2016.)

#### **2.4.3 Social environment**

China Internet Network Information Center (CNNIC) found that there are approximately 710 million people using the Internet in the first half year of 2016 (CNNIC 2016). Analysys presents that in 2016, there are a total of 731 million netizens and the new participants amount is 42.99 million with the 53.2% Internet penetration percentage. Among those netizens, the mobile user occupies more than 95% of the whole amount of Internet users. From year 2009, the Internet penetration rate has maintained a sustainable growth from 28.9% to 53.2% with a simultaneously increase of both Internet users and mobile users. Those facts give technical support and Internet using awareness for online buyers to making an online purchasing. The statistics from Analysys shows that the online shopping penetration rate increase up to more than 50% in 2014 and 63.8% in 2016. (Analysys 2017.)

Meanwhile, the customer's preference has changed. Customers concern to product safety and "green" concept much more than before. (News.163 2015) With the more powerful purchasing power, Chinese buyers have recently the ability to enjoy life and wish to buy more products with good quality and famous brand even with high price or from foreigner location (Sohu 2016).

#### **2.4.4 Technological environment**

With the development of new technology IOT (Internet of Things), the technology in e-tailing industry has faced some new opportunities, such as combining Internet with IOT. This combined retailing could be called "intelligent retailing industry". (Sanwen8 2016.)

At the same time, big data and statistical analysis are becoming to the leading technology derived from the Internet technology development. The large scale of Internet users brings a large amount of recordable information and statistics to tracking and analyzing the trends for many activities done on the Internet. (Linkshop 2016.)

The second emerging technology is live video streaming with mobile devices. This originates from western countries. Now in China, it is the time for "We-Media" proposed by the famous IT writer Dan Gillmor. More and more Internet stars sell products by live stream. This distribution or marketing channel will bring B2C e-tailing industry new opportunities.

Some technology such as VR could make people have better buying experience of perception with making people fitting on clothes or see products in front of the computer or with a mobile devices in the hand. (Tech.163 2016.)

The last one is the implementation of the intelligent logistics under the innovative period of industry 4.0, an era combining Internet and manufacture (Sohu 2015). Many B2C E-tailing websites apply this new system into their logistics system to increase its efficiency. For example, Jing Dong has researched and developed Jingdong unmanned delivery vehicle and is going to use in the year 2017. It could make a large amount of product delivery aiming at the location

with central orders such as office building, residence community and so on (Hengliang 2016).

## **2.5 Facing problems**

Though China owns a wide market and large transaction size in e-commerce in B2C market, many problems should be still optimized for long-term sustainable development. Based on the top 10 complaint areas concluded by China Electronic Commerce Research Center in 2016, according to the percentage of all the problems, from big to small, are quality issues, after-service, refund difficulty, false of shipment, shipment delay, difficulty of returns/exchange products, not shipping, Internet fake and fraud, and cancellation of order. The problems are majority in the field of service and delivery. Therefore, optimizing customer services and distribution logistics effectiveness increasing are two key areas need to be developed. (100ec 2016.)

## **3 Distribution logistics and customer services**

### **3.1 Logistics and supply chains**

#### **3.1.1 Difference between logistics and supply chain**

Logistics and supply chains have a tight connection with each other in the current business life. For general population, the difference between logistics and supply chain is always ignored. In the mind of people without professional acknowledge, logistics and supply chain are nearly a different title of one same thing. Therefore, professors in the field of logistics and supply chain (Rushton, Croucher & Baker 2010) proposed two easily understandable formulates presenting a clear view of what is logistics and supply chain:

- logistics is equal to materials management plus distribution;
- supply chain includes three key functions of suppliers, logistics and customers.

From those three authors (Rushton, Crocher and Backer) point of view, logistics is more about managing, monitoring and controlling the journey of conveying



the right physical products and also weapons to the right destination at the right time. Meanwhile, relatively speaking, they believe “supply chain” is a more inclusive world than “logistics”. (Rushton, Croucher & Baker 2010, p. 4) There is an unambiguously visual example for an FMCG (Fast Moving Consumer Goods) manufacturer presented below, which gives a visualized support for understanding:

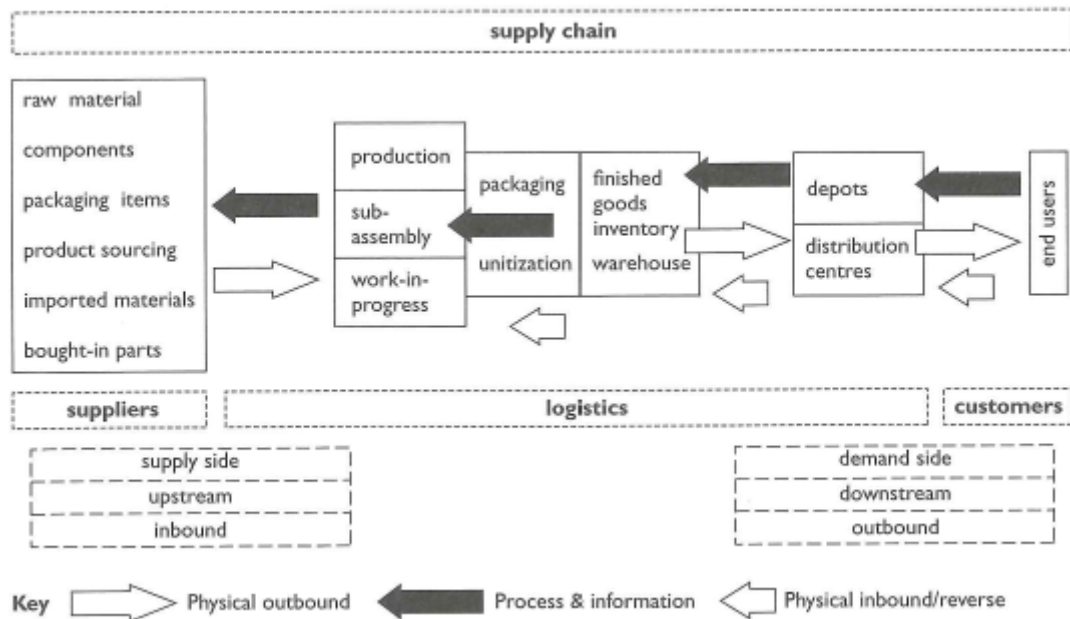


Figure 3. A flow representation of logistics-an example for an FMCG manufacturer (Rushton et al. 2010, p. 5)

Till now, a large-scale globalization brings the enterprises more accessibility to wider end-customers' location. Based on this reason, logistics and supply chain become more important to business entity.

### 3.1.2 The evolution of retail logistics

Actually, the logistics process or type is formed by the macro environment of commerce. In the period of traditional business, people always went to brick-and-mortar retail stores to purchase the products. In the real store, they can feel the products by their sense judgment such as touching, seeing and so on. In this period, without electronic technology, information sharing cannot reach a high level of freedom. Retailer is always the bridge between a manufacturer and buyers. In the traditional commerce period, a manufacturer was difficult to re-

ceive the customers' order immediately. John Sell thinks the small part of volumes of direct-to-customer goods would be handled by retailers or distribution centers (Sell 2015). This situation can be attributed to the first period (1970s) evolution generalized by Adam Robinson in Figure 4 below.

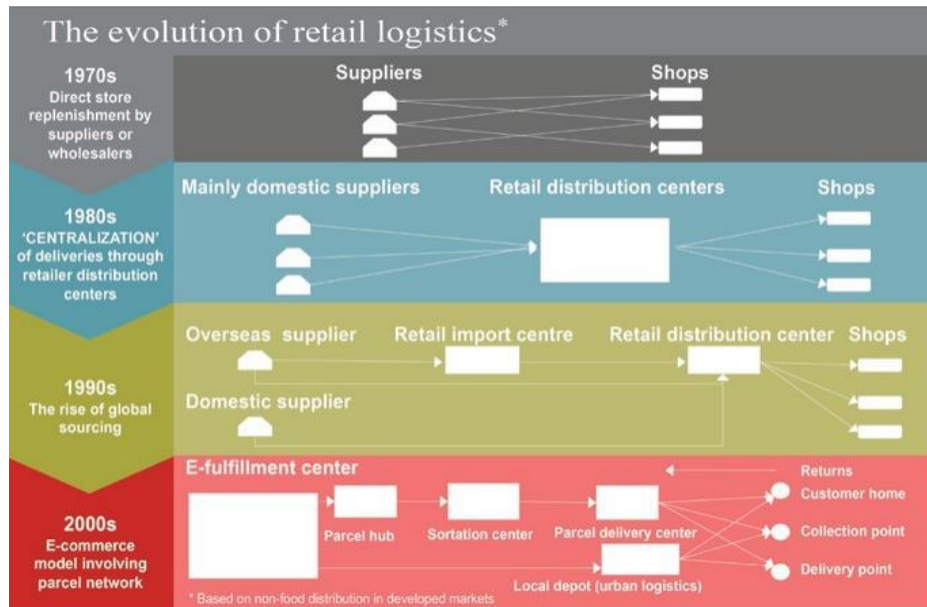


Figure 4. The evolution of retail logistics (Robinson 2014)

The second period in 1980s could be titled as “centralization”. Goods from suppliers are collected and controlled intensively at the consolidated warehouse with the same management system, which called retail distribution centers. (Sell 2015.)

Next decade, with the expansion of globalization influence, cross-border transaction increased. Since the 21th century, with the boom of Internet and electronic technology, e-commerce and mobile-commerce is growing up rapidly. (Sell 2015.)

With the Internet and electronic technology development, e-fulfillment period was coming. The biggest development is about information flow. Information sharing becomes quicker and less limited. With the information technology supporting, the other two flows (material and financial) have gained more efficiency and accessibility to reach the customer demands. (Sell 2015.)

## **3.2 Distribution logistics**

### **3.2.1 What is distribution logistics**

Distribution logistics is one part of the entire supply chains process. It is more concentrated on how to deliver the finished products to the hand of end-customers. The process of delivering the final goods to final customers can be called physical distribution. More professional by speaking, there is a commonly known definition from the Business Dictionary: it is responsible for merchandise handling, movement, and storage by using multiple distribution channels from the origin place of goods to the ultimate point (Business Dictionary). When the transaction activity occurs, the three flows (physical merchandize, information and currency) are concomitant with each other: Therefore, except of physical distribution, information distribution and currency transaction are included in the entire distribution logistics chain.

### **3.2.2 Key elements in distribution logistics chain**

Distribution logistics takes three major tasks into account: handling, storage and delivering of physical or mental goods. Thus, it is obvious that the key elements are related components in the process, for example, activities of inventory, warehousing, ordering, transportation, packaging, information transferring, as well as numerous other pertaining sections. The experts in the logistics and distribution filed believe that there are five key areas representing the important functions of distribution logistics, which is shown in the Figure 5 below:

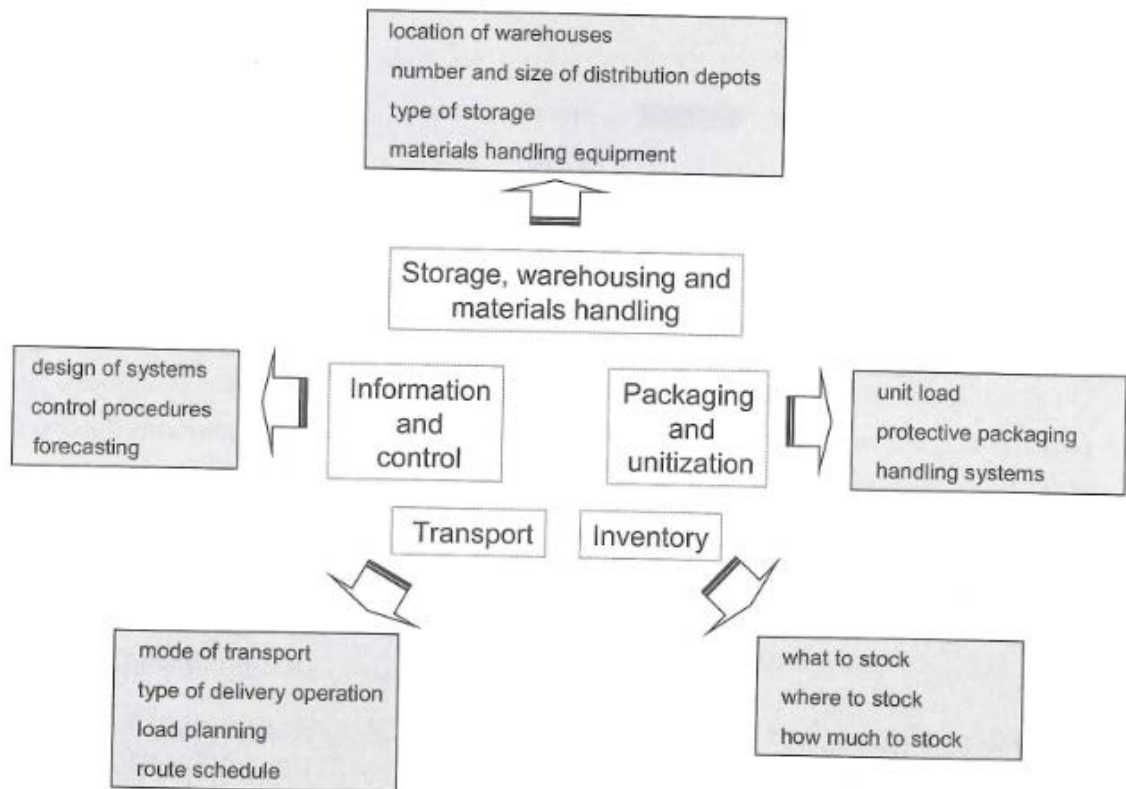


Figure 5. Five key elements of distribution logistics (Rushton et al. 2010, p. 6)

Distribution logistics is from B2C business to final customers. In the business process, the most important thing is to transmit ordered goods to customers. Therefore, B2C business needs to link with customers, warehouse, and transportation department. After receiving an order via networks, B2C business needs to send the information to the warehouse or distribution center, where the distribution center should start handling delivery issue. In this process, three core factors (storage, warehouse control and packaging) are needed. From the delivery company to end-buyers is the last step in the physical distribution logistics. In-time information sharing goes through all the process and phrases. Based on the information sharing, inventory management is implemented based on forecast management about ordering, stock in inventory control, etc. That information received from each department always needs to return to the B2C websites to show the basic products status and packaging tracking. (Rushton, Croucher & Baker 2010, p. 6.)

### 3.2.3 Distribution networks

During the procedure of transporting finished goods to customers, there are many nodes connecting with each other to form a systematic network. Each node has its responsibility and task to offer the support to the aimed product in order to reach the final destination. Brandimarte and Zotteri (2007) draw a picture to show the pure distribution (arborescent) network to give a visual description about the interaction between each node, which is placed below.

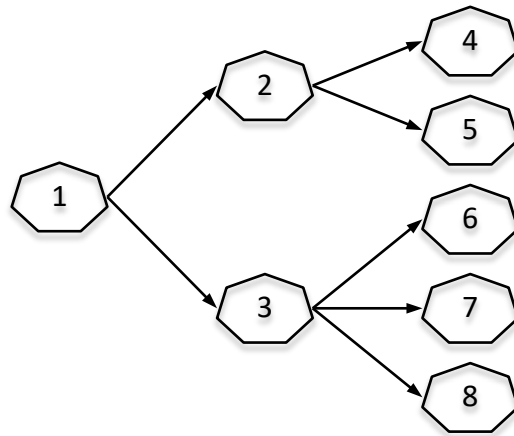


Figure 6. Pure distribution (arborescent) network (Brandmarte & Zotteri 2007, p. 8)

Combining this pure distribution networks with B2C E-commerce industry, the responsibility of each nodes could be explained: number 1 node is the B2C E-commerce business (in China always the websites) and number 2 and 3 nodes are distribution centres in different geographical regions. Numbers 4 to 8 is different deliverymen or “last hundred mile delivery point” or the final customers. (Brandimarte & Zotteri 2007, p. 8-9.)

### 3.2.4 E-logistics and E-distribution channel

The appearance of e-logistics is an outcome of wider range of electronic application on business. The advantages of accessing to the Internet are widely recognized by business players. The complex process between each connecting points among business chain is simplified with the use of online technology. Therefore, more cost-effective, shorter use of time, more safety and higher level of executive capacity and many other benefits could be reached by the logistics

with electronic technology. The typical feature of e-logistics is the application of Internet tools and electronic transaction method, and system as a communicating bridge (Barcik & Jakubiec 2012). The electronic technology is used in the field of purchasing, production, marketing, delivering, etc. Barcik and Jakubiec draw a conclusion about frequently used tools in the e-logistics that are for example electronic platform, data warehouse, system of offers and purchasing, transactions systems and so on (Barcik & Jakubiec 2012).

The most characteristic change of the traditional distribution logistics and e-distribution logistics is the access of Internet technology. Thus, initially general distribution channels should be understood to help further research on e-logistics distribution channels. The method and ways used to deliver goods in the logistics process are described in the term of distribution channels. There are two classifications of the distribution channels: physical distribution channel and transaction/trading distribution channel. The way to classify those two channels is defining the nature of products, which is physical or non-physical. In the B2C e-tailing industry, there are many different channel alternatives for the businesses from retailers to end-consumers: mail orders, orders from factory directly to home, online shopping and so on. Mostly, by analyzing the reality condition about product nature, marketing need and logistics process, combination of different channels will be applied in the practice. (Rushton & Baker 2010, p. 50-54.)

Turban and King proposed two methods used in the e-tailing logistics process in 2003: disintermediation and reintermediation, which aimed to simplify or integrate some layers and intermediaries among the supply chain respectively. Though, this proposal was given more than a decade ago, the figure below could give a rather clear view for people without many pre-understanding about this field. Figure 7 shows four types of methods of distribution. (Turban & King 2003, p. 98-101.)

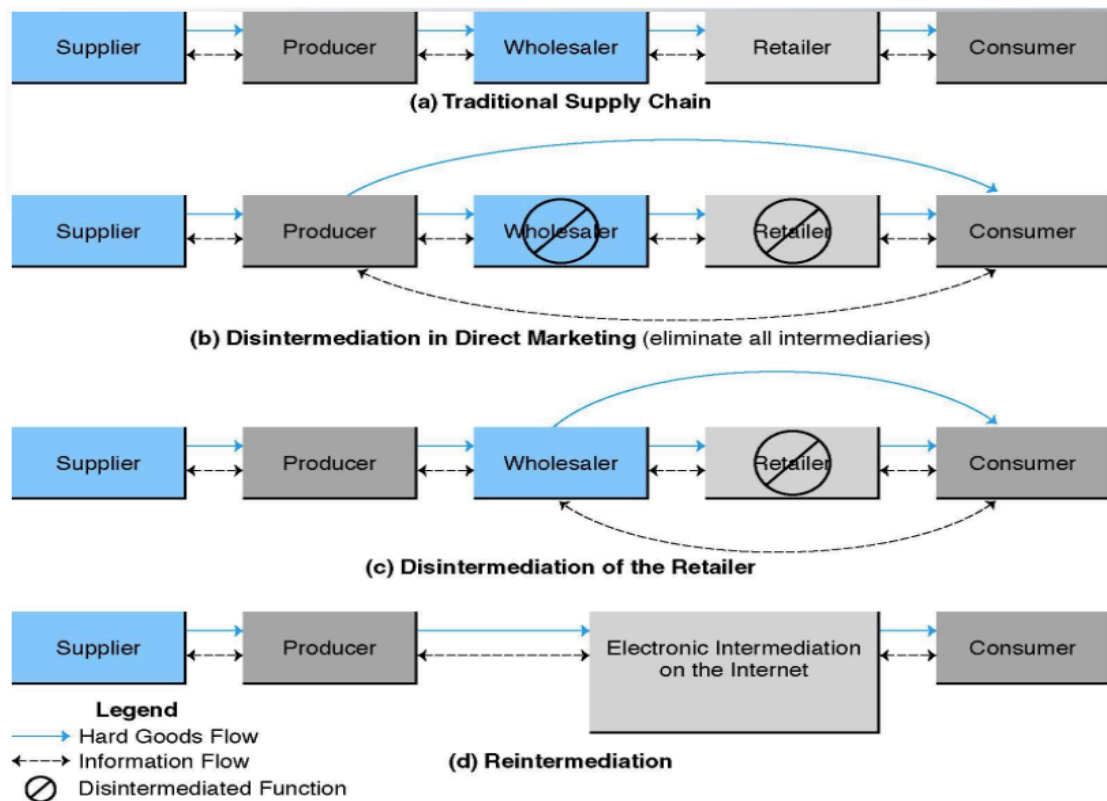


Figure 7. Different method of distribution in the B2C supply chain (Turban & King 2003, p. 100)

As mentioned in the chapter 2.3.1, there are three types of electronic retailers. Direct marketing players usually use disintermediation method and B2C retailing pure-player prefer using reintermediation method. The ultimate goals of those distribution strategies are optimizing the procedure to the final-consumers in order to simplifying the flow, shortening the order or cycle time, increasing the customer services, etc.

### 3.2.5 E-fulfilment

Tarn, Razi and other people defined that e-fulfillment's task is to reach the order volume and customer's expectation in the B2C e-commerce (Tarn & Razi & Wen & Perez 2003). This is a process to achieving the goal of correct transferring of ordered merchandise from upstream to the end downstream of the supply chain.

From a critical review by Jain, Gajjar, Shan & Sadh (2017), a summary of key components involved in the e-fulfillment has been conducted, which is presented in the Figure 8 below.

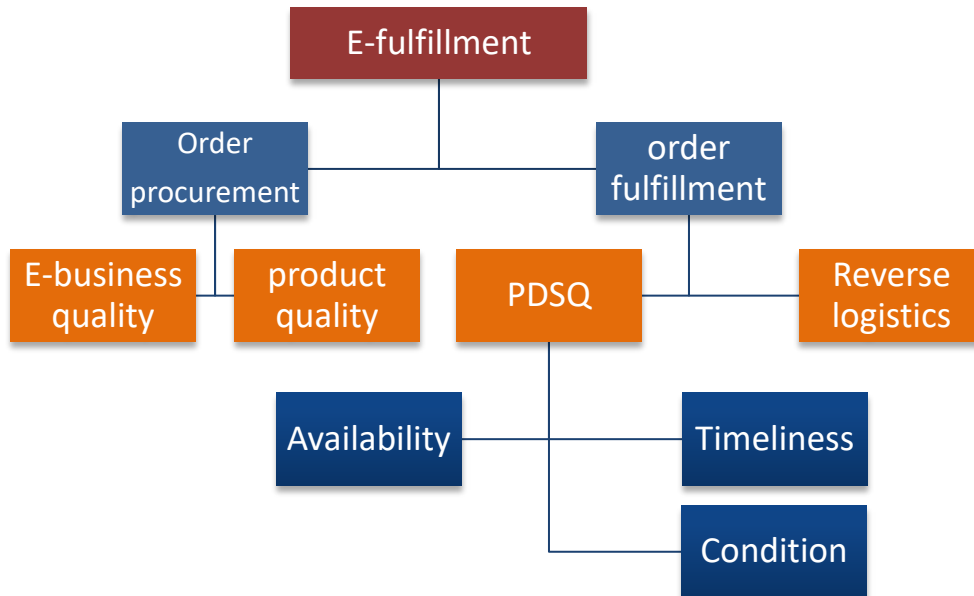


Figure 8. Key elements of E-fulfillment. (Jain, N. K. & Gajjar, H. & Shah, B. J. & Sadh, A. 2017, p. 351)

Source: Figure 1 in E-fulfillment dimensions and its influence on customers in e-tailing: a critical review

Order procurement and order fulfillment are included in the e-fulfillment. In the terms of procurement, quality is the key factor for both electronic commerce and product. Boyer and Hult (2005a) found that product quality is about how perceived physical quality of product matches the customer's wish (Jain et al. 2017, p. 352). Keeping a high level of product quality in the initial process of selecting retail products is the premise. However, beyond the researching scope in this report, the process of upstream of supply chain (manufacturer, producer to the retailer) is not studied. In this way, product quality is more related to delivery process that retailer should maintain the quality during the inventory and delivering process. During the inventory and delivery process, packaging has the function to protecting the goods and keep parcel with a high quality during the shipping is another significant step.



When it comes to order fulfillment, physical distribution service quality (PDSQ) and reverse logistics are two important constituent parts. A general review of PDSQ is proposed by Bienstock, Mentzer & Bird (2017) that there are three key factors in it: availability, timeliness, and condition. These three dimensions have the connection to “three right” principle: business can send the right product to customers at right time and destination. Availability judges the extent of which products are available in the stock. Timeliness determines used time in the delivery steps. Condition is about received product quality for customers. (Bienstock et al. 2017.)

Reverse logistics in recent years has become one of the most accountable factors to customer satisfaction, which concerns about product returns and supply chain sustainability.

### **3.2.6 E-fulfillment and E-distribution logistics management**

All e-fulfillment factors have a significant influence to the logistics services performance and customer satisfaction, which needs to be taken into account of distribution logistics management. For e-fulfillment operations, three important areas should be controlled: fulfillment center, infostructure and controlling returns (Tarn et al. 2003). As mentioned in the chapter 3.2.3, there are five key elements in the distribution logistics, which are storage and warehouse, packaging, inventory, transport and information controlling. Both two views of distribution logistics could be connected to each other and finally give a summary of the management strategy about how to make effective distribution logistics.

- **Fulfillment center** (warehouse, packaging, inventory and transport):

Fulfillment center executes mainly 5 key activities in the supply chain: storage, picking, sorting, packaging and delivery, which can be categorized into warehouse, packaging, inventory and transport process. Therefore, fulfillment’s function is similar to the distribution center.

About **storage and inventory**, physical storage strategy and stock keeping unit (SKU) should be concerned about. About the storage strategy, how to maintain the products effectively and efficiently is very important. There are

many things that need to have a professional design, such as location classification, containers, etc. based on the physical characteristics of products and its degree of actives. Tarn et al. introduce a picking level based on different three moving level of products (slow, medium, and fast) to save the time and applying the suitable physical tools (e.g. Conveyors). In order to maintain a relative low SKU to decrease the inventory costs, demand forecast is essential in every business periods. (Tarn et al. 2003) With a suitable forecasting method in the premises, understanding, collecting data and analyzing data of elements of demand pattern are the next step to predicate future demand. There are four main patterns: actual demand, trend line, seasonal fluctuation and random fluctuation. Inventory replenishment system is also highlighted to keep a balance SKU (Rushton et al. 2010, p. 188-189).

A **warehouse** is a physical construction with an integrated function (Rushton et al. 2010, p. 227-228):

- 1) inventory holding center: storing in the warehouse
- 2) consolidated center: together different products into one parcel
- 3) cross-dock center: parcel move to the next vehicle from last vehicle without storing in the warehouse
- 4) sortation center: sorting the products
- 5) assembly facility: assembly the products
- 6) trans-shipment point: serving the outlying regions of the country
- 7) returned goods center: responsible for goods returning

The geographic location has its strategic meaning for choosing a warehouse. Business should control its service area and make its marketing/service map to design the best warehouse/distribution center.

When it comes to **shipping and transportation**, time, accuracy and safety are essential for maintaining a high level of customer services. Under the electronic commerce, extranet and information technology support related functions to link with each other, for example, warehousing, ordering center, drivers, customers, etc. (Bayles 2001, p.154-155). Due to the timely information sharing via Internet, flexible and fast shipping and delivery, and par-

cel tracking online could be achieved. Multiple transportation channels are integrated to satisfy the different product characteristics and chosen delivery method. To illustrate, fresh food need a transport tools with fast speed and preservation technology. The delivery route should be carefully designed and updated if needed.

- **Infostructure:**

Infostructure is derived from the invention of electronic technology and Internet. It is a combination of data capturing and supply chain application systems by using multi-platform information technology (Tarn et al. 2003). Collecting those real-time data can help analyze the situation and performance for both business and customers.

- **Controlling returns (reverse logistics):**

Reverse logistics is now a competitive advantage for business. Reverse logistics is in a reverse direction of normal supply chain from the final consumers to the manufacturer point. This is a way to recollecting the value after the transaction. (SearchmanufacturingERP 2016.) There are many reasons for product returns: warranty, repair, recycling demand, after-sales services, product returns, etc. A clear reverse logistics policy is the basic things and should be aware by the customers about the returns reason, returns application, refund policy, returns time limitation, and so on. The process from receiving return decisions of customers to refunding or repairing products needs to be fast and flexible. (Tarn et al.2003 & Rushton et al. 2010.)

Despite of information and product flows, payment method accounts a lot for customers nowadays with electronic technology. Now, e-payment method provides a much more convenient paying way of customers. To illustrate, there are many different payment methods and channels now: payment service is the most popular way (AliPay, e-wallet, PayPal); and credit and debit card; and also pay by delivery is welcomed by customers to ensure the product quality by checking them when receiving it immediately. (Tarn et al.2003 & Rushton et al. 2010.)

### 3.2.7 Last-mile delivery

With the rapidly growth of e-commerce in retailing industry, the distance between end-consumers and retailers is shortened. The implementation of Internet platform and other electronic technologies makes it is essential to reduce the costs and increase the efficiency in the direct-to-consumer logistics process. (Gevaers & Van de Voorde & Vanelislander 2009.)

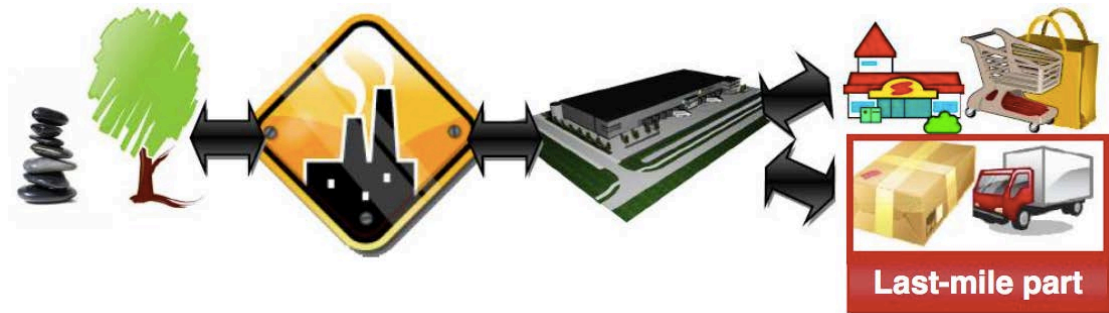


Figure 9. Basic structure of the supply chain (Gevaers et al. 2009)

According to Singh (2016), the last-mile delivery means that the finished products are transported from fulfillment center to the order makers. Because the last-mile delivery is the final activity before ordered goods reach shoppers, there is no doubt that it is important to involve loyal consumers. (Singh A 2016.)

Gevaers et al. (2009) deemed that the last mile delivery, as the last part of supply chain from company to final-customers, needs to be measured carefully in terms of efficiency, costs, and environmental protection and sustainable development (Gevaers et al. 2009).

Why the last-mile delivery is a complicated part for company to control costs, efficiency and environmental sustainability? Cohen (2016) finds there are four challenges:

- costs
- transparency
- efficiency
- friction.

The last-mile delivery takes lots of money (Cohen 2016). Because the last mile delivery is aimed to distribute every single parcel to the right place, more demands of labor, vehicle and information controlling are needed, which imperceptibly adds the costs (Gevaers et al. 2009). Nowadays, customer's services are required to have higher level of transparency. In recent year, consumers appreciate to have the real-time tracking information about the parcel. Shoppers hope to see updated tracking information frequently and conveniently via online shopping platform or mobile devices. The core challenge of efficiency is time-based delivery to increase customer satisfaction. Under electronic technology and science era, an enterprise should take full advantage of technology to gain more competitiveness. For example, the white paper about technological disruption and innovation in last-mile delivery introduced some ways: making every point in supply chain matches each other (product search and match or courier receives and complete tasks, etc.); automatic dispatching technology; automatic delivery technology, such as drones and delivery robots and so on (Graduate School of Stanford Business 2016). The last challenge is friction. In the process of connecting with customers, collecting consumers' inquires, requests and giving a quick and appropriate response are the key ways. (Cohen 2016.)

Combined with the specific situation in the Chinese e-commerce market, there were several problems that need to be improved: lack of competitive companies; low efficiency delivery; parcel receiver and deliver have different points of view; repeated delivery; long time window; and lack of professionals (Han 2016). All those shortages make costs higher and customer satisfaction lower. The reason of them is based on the specific country's economic, social, political, etc. conditions.

## **4 Logistics customer services**

### **4.1 Importance of customer service**

Nowadays in business and industry world, the quality of the service that company provides to customers determines the extent of the awareness of enterprise and consumer loyalty. No matter of which category the enterprise is, a core concept will not change: delivering value to the product receivers. The val-

ue is not only about physical products itself, but also refers to services. With the technology development, the distance of product quality between different companies is decreased as the increasing average product quality. By providing a high quality of customer services, the value transferred to consumers is added. (Christopher & Peck 2003, pp.41-43.)

## **4.2 Key elements of logistics customer services**

In the view of transaction terms, there is a famous classification method of customer service elements widely used in the customer service field. There are three major categories:

Pre-transaction period means the period before the transaction activity the timing of the customer services in this category before the actual transaction occurred. Those services are related to establishment of framework policy, method, system or initial accessibility to personnel, etc. In this period, services are objective to meet the customer expectation and show the basic information about products features, types, functions, and so on (Rushton et al. 2010, p. 31).

During transaction, those services are aimed to support distribution and logistics process during the transaction, for example, order cycle time, inventory availability, timeliness, delivery time, conditions of goods and information providing. (Rushton et al. 2010, p. 31.)

After the transaction, services in this time period are generally tilted with after-sale services, which happen after the delivery finished. To illustrate, there are services about invoicing, warranty, product returns, customer feedbacks, etc. This type of customer service is important for both customers and companies via communications. Business player can improve its services by collecting feedbacks from customers and then improve the customer satisfaction and loyalty. (Rushton et al. 2010, p. 31.)

## **4.3 Customer satisfaction and loyalty**

To change the potential customers to the loyal customers is the objective for nearly all the businesses. Customer satisfaction and loyalty have interacted re-

relationship with each other. Customers with higher satisfaction will be easier to access to higher loyalty to business. In turns, after establishing a loyalty perception to business, customers can feel more satisfied about the products and services. However, customers feeling satisfied might not have high loyalty and on the other hand, loyal customers might have low level of satisfaction. When the customer's expectation is achieved, they would feel satisfied about the transaction. (Shankar & Smith & Rangaswamy 2003.)

#### **4.4 Customer services under e-commerce**

Customer service is the determined factor to customer satisfaction. Good customer service can make a shopper feel happy. Based on another point of view, customer concerns about four important elements with a close relationship to the customer value: time, dependability, communication and flexibility. Those four elements indicate the requirements and wish from customers: they hope to gain the dreamed products without being damaged and as less time as possible; they hope to have a flexible ordering system facing the uncertainty and changing needs and an efficient communication way to have a real-time support for problems during the transaction process. (Rushton et al. 2010, p. 34.)

Online shopping could give customers an easier access to more information about price, quality, and producers of one same product from different websites. Therefore, the customers under e-commerce would be more captious. In the B2C e-tailing industry, the mainly connection platform between customers and retailers is website. Therefore, creating and realization of customer expectation, value transferring, and communication are occurred on online shopping websites. Based on the literature review from Kalia, Kaur, and Singh about the consumer satisfaction in e-shopping, a few points have been summarized, which have a significant influence on satisfaction (Kalia et al. 2017).

The first point is site design. A good design can attract more customers with positive first impression and makes consumer's journey more easier to access to any parts from the searching, ordering, paying, tracking, receiving, and after-sales services. (Kalia et al. 2017.)

The second point is reliability. It means that both hardware and software of the website reliable, accessible and accurate. (Kalia et al. 2017.)

The third point is security. It is referred to the value of both retailer and customers. Information should be classified to avoid credit card fraud, privacy leak, product is stealthily substituted, etc. (Kalia et al. 2017.)

The next point is information. A survey shows that modern people check the shipping process many times a day. With the real-time information technology, customers can track their order, understand latest stocking condition, and other customers' comments. The other points are perceived usefulness, ease of use, etc. (Kalia et al. 2017.)

## **5 The successful example analysis: The logistics effectiveness and customer service of Chinese B2C e-tailing websites**

Logistics control and assessment also belong to the supply chain management. Supply chain effectiveness is determined by the key points among the whole supply chain, such as manufacturing, procurements, distribution, marketing, etc. The measurement way, in theoretical view, is analyzing its performance by studying each point's performance. As supply chain and logistics already have a long developing history, there are many models which could help companies to analyze its effectiveness performance, for example ERP model. Those technology systems offer the support for logistics companies to improve their supply chain and logistics design and administration. In this research, with the macro view, the general situation of Chinese B2C e-tailing websites are conducted by analyzing one typical cases companies: Vipshop.

### **5.1 Backgrounds of Vipshop**

Vipshop offers best discount sales for diversity of products. Vipshop is a "young" B2C e-tailing company established in 2008 in Guangzhou, China. Vipshop firstly brought the business model of "genuine brand + preferential discount + flash sale" into China. (Vipshop.com.)



In the first quarter in 2017, the total net revenue of Vipshop was approximately 2.32 billion dollars, with the increase of 31.1% compared with that in the same period in 2016. Active users reached 26 million people with 32% increase and the amount of orders growing 23% to 72.1 million pieces. (Tech.qq 2017) Nowadays, Vipshop offers online platform of both PC and mobile APP accessing way for customers. Vipshop sells many different kinds of products such as cosmetics, clothing, shoes, home, mother and baby products, etc. The flash sale begins every morning at 10 o'clock and the brand information was updated on the website a few days ago. Vipshop's business also referred to cross-border transactions to providing foreigners high quality products.

## **5.2 Distribution logistics of Vipshop**

The most competitive advantage for Vipshop distribution logistics is self-established warehouse-logistics system. Till today, Vipshop owns 5 distribution centers located at Tianjing, Guangdong, Jiangsu, Sichuan and Hubei (Beijing-businessstoday 2016). Those five distribution centers could offer services to most areas of China and are located in the five main areas of China. In the Figure 10 below, red points are the five distribution centers and a visual view of geography location could be seen.



Figure 10. Vipshop Five Distribution Centers Map.

The five locations are aimed to serve the customers in central, northern, southern, eastern and northwestern China. This warehouse system is using centralization method. The order is picked based on the delivery destination and then goods are shipped to the closest distribution center. With the centralization, order cycle time, delivery time, inventory and labor costs can be reduced. In this year, the total area of Vipshop warehouse is around two million square meters. (Analysys 2017.)

In the self-established warehouse-logistics system, Vipshop builds its vehicle teams with self-owned containers as well. In the end of 2016, there are more than 250 transport arteries owned by Vipshop (Analysys 2017). At the same time, Vipshop actively cooperates with leading airline companies. After sending the products from the centralized distribution center, goods will be transmitted to the local distribution points by the courier. Under the multiple delivery and transportation system, high-speed shipping can be reached. (Science.china 2016.) There is a minimum amount of purchasing costs (288 CNY) to gain the free shipping (Vipshop.com).

The infrastructures of warehouse and transportation give the consolidated roots for the well-performed logistics. Vipshop make the delivery strategy of just-in-time delivery and “zero inventory” to build a quick logistics process. Vipshop will refer to the stock condition from suppliers and then based on the order demand to send the quantity needed to suppliers. Due to the business type (flash sales), Vipshop can achieve the “zero inventory” of discount products after its selling time ending. With the combination of those two inventory strategy, Vipshop dramatically decrease inventory costs, time of shipping and delivery and administration costs. (Beijingbusinesstoday 2016.)

In online shopping, there is one big problem for a shopper: they cannot feel the products, which will bring purchasing uncertainty and errors, especially for clothing. Therefore, product returns cannot be avoided and nowadays this becomes more and more normal and frequent. A well-built reverse logistics system is needed to save the labor, time and costs. Vipshop has a returns policy that any product could be returned without reason within seven days from the parcel arriving day. The parcel returns way is easy for customers: in the website or mobile APP, customers with product returning decision can apply for returns by just clicking some easy button and give a very simple reason. There is a universal reverse center and the location will be told to the customers after applying the product returns. Then customers can book the door-to-door service. If the left products price is over the 288 CNY, the transport fee will be returned to your Vipshop virtual wallet. If the price is less than 288 CNY, customers should be responsible for the transport fee. Vipshop will present the parcel tracking information automatically. (Vipshop.com.)

Not only building self-established warehouse-logistics system, Vipshop also established the third party logistics company by acquisition of existing logistics companies (Beijingbusinesstoday 2016.)

Vipshop has many different payment methods: Alipay, credit card, debit card and one most welcomed method: pay on delivery. Diverse payment methods can be suitable for different types of customers. (Vipshop.com.)

About the communication services, Vipshop has only call center to provide remote support. Probably because of the flash sales business type, there is no access to give the feedbacks and comments for the products. However, the repetitive ratio is not low and feedback and comments could give a comparison to buyers. (Vipshop.com.)

The last thing is about the website design. The dominant color is pink due to its logo. Important information is located in the well-marked place. Customers can find the required products quickly.



Figure 11. Vipshop website design (Vipshop.com)

Above all, in recent years Vipshop has been paying many efforts to optimization of logistics process and supply chain. With the increase of distribution centers and expanding areas of warehousing, the capability of logistics becomes stronger than before. In the Chinese market, competition is very fierce. Vipshop needs to improve its logistics, supply chain and also customer services to engage more loyal customers.

## 6 Empirical study

There are two surveys conducted in this empirical study to finally obtain the evidence to show customers' opinions to the logistics-related factors in the customer services. The main objective of this research is to understand the key factors in distribution logistics that will influence customer's purchasing decision-making. The distribution logistics and e-fulfillment will affect customer's satisfaction and e-trust. Thus, analyzing customers' opinions and attitudes to customer services offered by B2C e-tailors can help learn about distribution logistics management.

## **6.1 Sampling, data collection and data analysis**

The aimed population is Chinese customers who purchase goods via B2C platform. Because of the huge number of population in China, sampling is the way to predict the average situation without too much consumption of money, labor and time. In this research, the sample size is 100 and was considered enough to collect the data. However, comparing with the total amount of population in China, it is too small and must have limitation and deviations, which possibly happen in each research.

In this research, one structured questionnaire and two semi-structured interviews were designed to collect data. The questionnaire was sent randomly to Chinese people via social media tools (Wechat, QQ and Weibo). Those three social medias have a dramatical amount of users so that can provide more chances to collect the data from respondents with higher randomness. There are 11 questions (shown in Appendix 1) in the survey with different types, such as multiple choice, single choice questions, and so on. Two interviews were conducted with two Chinese people. To avoiding deviation and too much subjectivity in the first survey, understanding different feeling from different people is required. Therefore, a young man studying in a Chinese university and a woman in the middle age were chosen to be the interviewee.

For those two types of survey, correspondent data analysis methods were used. Quantitative method was used in analyzing data from questionnaire. The main tool is Excel to process data. Qualitative method was used to analyze the conversations.

## **6.2 Quantitative research**

The final number of respondents has reached 107 people, which was 7 respondents more than the initial setting. In the questionnaire, there are 11 structured questions. Those questions are referred to the basic identity characteristics, customer experiences, customer preferences, buying behaviors, etc.

In the beginning, the first questions asked about gender. The size of female respondents (74) is more than twice of the size of male respondents (33). Among

all the respondents, 44% of them are from age 28 to age 40 and 26% from age 18 to 27. The details are shown in the Figure 12 below:

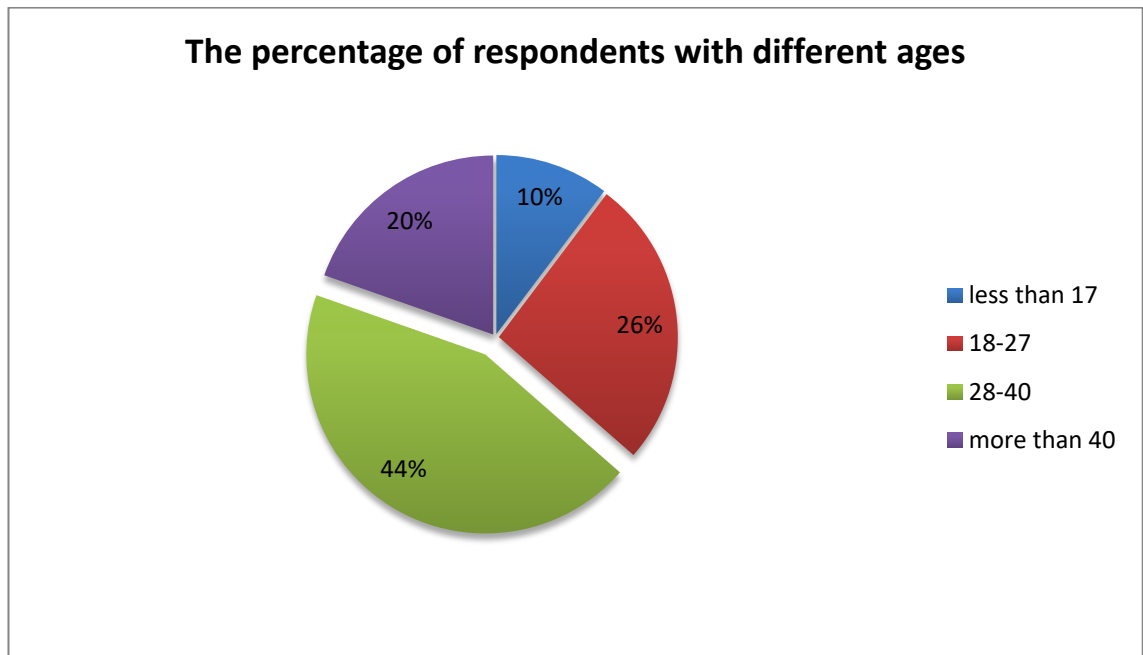


Figure 12. The percentage of respondents with different ages

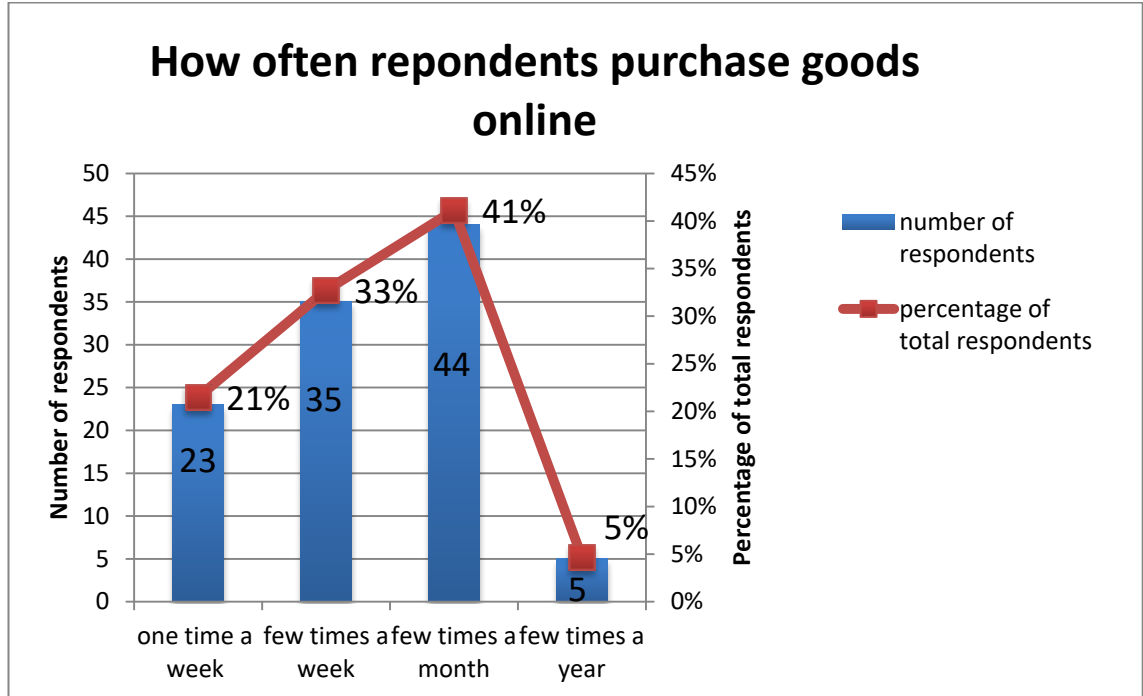


Figure 13. How often respondents purchase goods online

By analyzing the data collected from question 3, it can be found that there was 41% of total respondents prefer to purchase online a few times a month. Figure 13 shows the details and comparisons. Only 5% of the total respondents purchase products online only few times a year. This shows that in China, purchasing online has a high acceptance level.

In those 107 respondents, Vipshop is the most welcomed B2C e-tailing platform (39% of total respondents). There were 32% of total respondents who like Tmall and 29 percentages of the whole respondents buy products via Jingdong.

Question 6 is the most complicated question in this survey. It has 16 options that all of them have tightly connected to both customer services and distribution logistics. Firstly, the overview condition was analyzed in Figure 14.

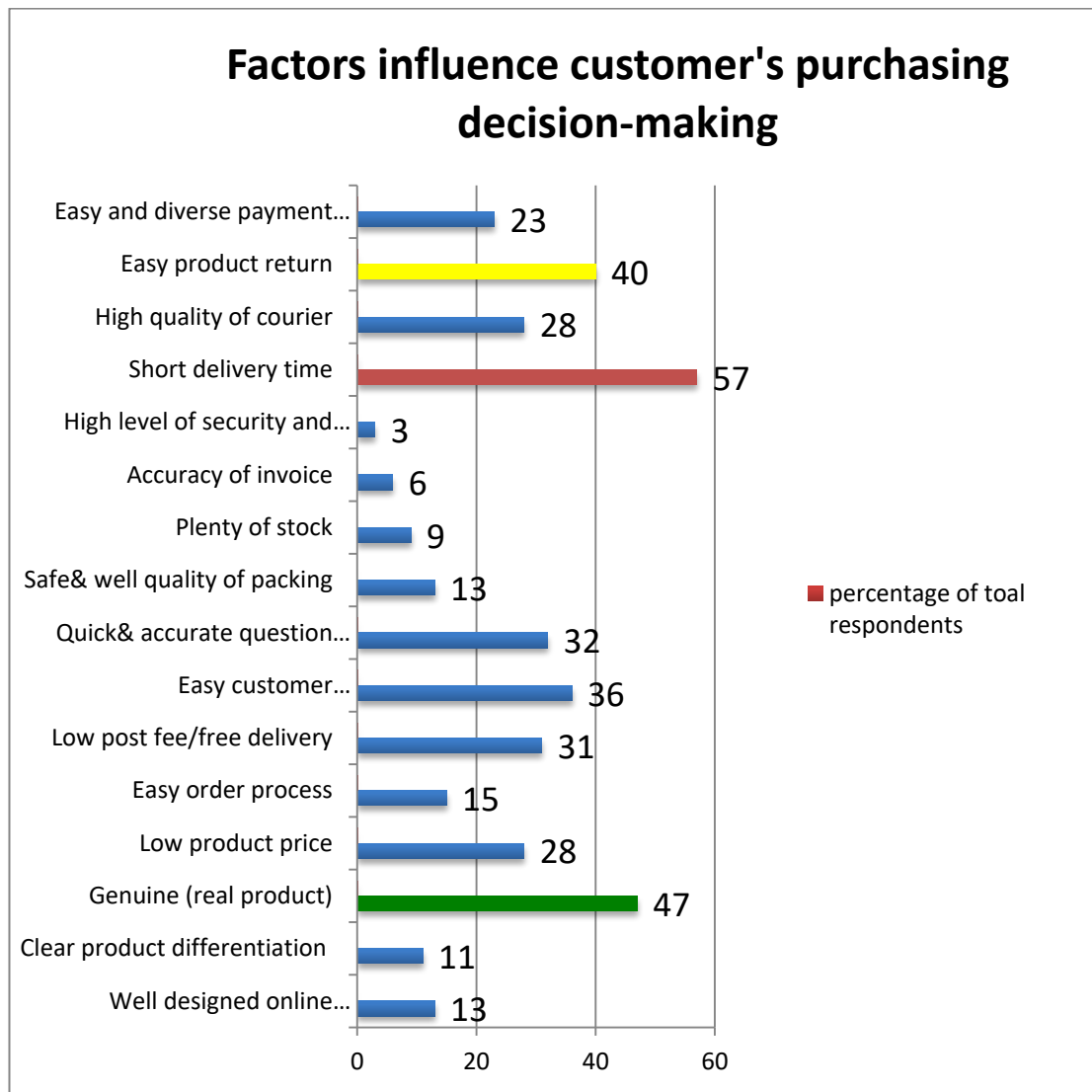


Figure 14. Factors influence customer's purchasing decision-making

Figure 15 indicated that the most influential factors are real product, short delivery time and easy product return. At the same time, customer communication service and delivery price also important to affect people choosing the B2C online shopping platform.

From the Figure 15 below, it is clear that the four main reasons why customers prefer Vipshop to buy products are: short delivery time, easy product return, high quality of courier and genuineness (real product).



Figure 15. Factors why customers choose Vipshop

Figure 16 below presents that B2C platform Tmall, has four advantages attracting customers: useful customer comments, easy customer communication service, genuineness (real products) and low post fee/free delivery.





Figure 16. Factors why customers choose Tmall

The next analysis is for Jingdong in Figure 16. Jingdong's most desirable features are: short delivery time, useful customer comments, genuineness (real products) and low post fee/free delivery.



Figure 17. Factors why customers choose Jingdong

Among the respondents, there were 61 respondents who like receiving parcel no more than two days. And 31 percent of the whole respondents cannot bear the parcel arriving more than one day. This result shows that nowadays life, people concentrate much more on time. Meanwhile, Vipshop lacks useful customers' comments of the goods when compared to other two companies. The result by analyzing the data from question 8 showed that a well-structured area for customers' comments is really important. Nearly half of the respondents believed that the influence of feedbacks reached level four (really influential).

In the last-mile delivery, parcel tracking is one important part. From level 1 (rarely check the tracking information) up to level 5 (nearly check every time), there were 53% of respondents choosing level 3 and 23% of respondents showed they would check in a really high frequency (level 4).

In the customer's shopping journey, paying is a necessary part. 40% of respondents prefer Alipay and 30% of respondents like paying after receiving the goods. Nowadays, in China, home-delivery is common. 72% of respondents

receive a parcel at home by courier and 24% of respondents picked up the parcel by themselves from the nearest local parcel distribution node.

### **6.3 Qualitative research**

The semi-structured interview has 5 questions:

- Talking something about your shopping habits, for example, what B2C e-tailing website you like most? What kind of products you often buy? How often, etc.
- Why do you often choose that website? Give some reason about what places attracts you to visit that website? (Price, product, logistics, etc.)
- About the services they provided to you, were you satisfied and what you think they need to improve?
- Do you have some opinions on the logistics process, which will affect your own received value? Such as do you care about the delivery time/shipping method, stock, etc.?
- Which payment method you like most and did you have some deep impressed experience about it?

The objective of the interview was to have a deeper understanding by communicating face-to-face. By communicating with their favorite online shopping platform and funny experiences during their online shopping life, customer's demand and preferences can be summarized. The Facetime was used in the interview because the interviewees and the researcher were located in different countries. Every interview was continued about 20 minutes. There were many interesting details during the interview.

The first interviewee is a young man (call he X) who is still in the university. He likes playing computer games and that is the main reason he always stays at home or apartment at the university. He likes to buy foods from Internet. His most frequently visited website is Tmall. Tmall owns the welcomed brands that have a real shop. X hopes to eat food outside of home but does not want to walk or go out of home. Tmall is a good choice for buying food and has mature communication tools that can help X to chat with the shop owner to ask for discounts. Below every product, X can see other customers' feedbacks about that

products. The comment is in the form of words, pictures, and also stars. X said this is why he likes to buy products in Tmall. However, X sometimes has met some “ridiculous” shop owners because of the “bad” feedbacks. They called X to ask for changing the bad feedbacks. As a student at the university, X has been in the logistics course before. Thus, X knows something about the logistics. He told me that he cared about time, so he prefers one-day delivery. He also thinks that courier calls carrier when parcel has arrived is really time-saving way. The worst online shopping experience is that X received “horrible” parcel from the shop owner because of that “bad feedbacks”.

Another interviewee is a middle-aged woman. She likes buying beautiful clothes, cosmetics, shoes, bags and everything related to “beauty”. Her mostly liked website is Vipshop. She told that there are three reasons: short delivery time, big discount and easy product return with the promise of 7-days return without reason. She feels that now in the shopping mall, the goods are expensive. Vipshop always has good discounts with high quality of goods. When talking about the logistics, she was excited about that. She really knows about Vipshop logistics, because this is related to one of the three most attractive features: short delivery time. She told me that after she has paid, dispatching is really fast and after dispatching goods, she can track them via the “your order” page on the Vipshop website. It is updated frequently and in the end, the courier’s name and phone will be shown in the tracking information. Sometime, if she has urgent tasks and not at home, it is convenient to call the courier to avoid delivery failure. She also knows Vipshop has five distribution centers. One thing she thinks is really wonderful is the packing of Vipshop. She said she likes uniform designed packing box and inside the box, several gas flushing pouches are protecting the goods. When talking about the worst experience, she told stories about a damaged product and a failed experience of product return. The website was not Vipshop. After this experience, she always consider about the product returning service. She likes the payment method as well. In Vipshop, nearly every product can be paid after receiving them. It can avoid money waste if the product was damaged in the delivery.

## **7 Conclusion and discussion**

### **7.1 Conclusion**

The objective of the quantitative and qualitative researches is analyzing the customer's opinions to online website's customer services. With this analysis, the final goal of the whole research can be reached. Based on the data analyzed and figures, some common points can be summarized.

More than half of the respondents cannot bear the delivery time more than two days and 31% of them cannot bear even exceeding one day. Those evidences show in nowadays high-speed life, people concentrate dramatically on time management. 16.7% of the respondents chose easy communication service as an important element to make their decision. Also they desire fast and accurate inquire solving. X also thinks communicating in real-time can solve many problems. Communication can collect real-time information from customers and then after understanding their needs, transferring value is not difficult. From the interviews, the woman thinks product return is important and 11% of respondents believe product returning is necessary.

Comparing those three B2C platforms and also combining with the overview situation, it is obvious that customers pay attention to some common features: short delivery time, genuineness, easy product return, low post fee, easy communication service and useful customer comments.

Above all, customers concentrate more on time, quality, cost, and information share. A company should focus on those characteristics and to achieve consumer's demand. Actually, from the researcher's point of view, combined with practical and theoretical understanding, a company can reach customer's need by two ways: firstly one is to make distribution logistics management in inventory, warehouse, etc.; and the second way is the last-mile delivery. The last-mile delivery is the last part and has the closest distinction to the final-customers, transparency about tracking and also real-time information sharing, high quality of courier, high product quality with packaging and product return.

## 7.2 Discussion

From this thesis, the researcher has learned a deep understanding on the logistics, e-tailing industry in China, and customer services. In recent years, e-commerce and also B2C e-tailing have experienced a high-speed development. Before doing this thesis, the researcher has never understood the latest technology and that the e-tailing has faced new opportunities with IOT. In the B2C e-tailing industry, end-customer is important as the core value chain and also as the final value receiver. Distribution logistics is aimed to deliver value, thus, it is necessary to learn about demand from customers. Understanding the most influential elements for decision-making is not only beneficial for future distribution logistics but also for increasing customer loyalty. In the Chinese market, though China already has a large market, diversity of new entrances makes the high competition. How to satisfy your customer is the key for companies.

In the report, the researcher not only made large amount of literature review, but also conducted one survey and two interviews. Question design taught how to ask questions to reach the final aim. Then the evidence can support the final result. Fortunately 107 respondents were collected successfully and nobody missed the questions. Deviation can not be totally avoided but can be decreased. How to design the whole process of survey made the researcher understand that scientific research needs carefulness. The process of conducting a survey and interviews gave the example for some possibilities in the future, for example, the possible survey questions, target population, sample size, deviation, methods and so on.

The Chinese market still faces huge opportunities to develop retailing industry. The arising of e-tailing is the outcome of Internet technology. Distribution logistics is like a bridge linking retailer and customer. It also an important part of supply chain in order to decrease costs. Thus, in this period, under active macro-environment in the Chinese market, it is a suitable time for B2C e-tailing companies to improve their distribution logistics based on the aspects that have the significant influence on customer's buying-decision making.

## Figures

Figure 1. 2009-2016 China B2C E-retailing Industry Transaction Size, p. 10

Figure 2. 2016 China B2C E-tailing Market Share, p. 12

Figure 3. A flow representation of logistics-an example for an FMCG manufacturer, p. 17

Figure 4. The evolution of retail logistics, p. 18

Figure 5. Five key elements of distribution logistics, p. 20

Figure 6. Pure distribution (arborescent) network, p. 21

Figure 7. Different method of distribution in the B2C supply chain, p. 23

Figure 8. Key elements of E-fulfilment, p. 24

Figure 9. Basic structure of the supply chain, p. 28

Figure 10. Vipshop Five Distribution Centers Map, p. 34

Figure 11. Vipshop website design, p. 36

Figure 12. The percentage of respondents with different ages, p. 38

Figure 13. How often respondents purchasing goods online, p. 38

Figure 14. Factors influence customer's purchasing decision-making, p. 39

Figure 15. Factors why customers choose Vipshop, p. 40

Figure 16. Factors why customers choose Tmall, p. 41

Figure 17. Factors why customers choose Jingdong, p. 42

## References

100ec. 2016. Chinese e-commerce market data monitoring report in the first half year of 2016. [http://www.100ec.cn/zt/upload\\_data/B2B/EC.pdf](http://www.100ec.cn/zt/upload_data/B2B/EC.pdf). Accessed on 13 April 2017.

Analysys 2017. Chinese B2C e-tailing market annual analysis 2017. <https://www.analysys.cn/analysis/8/details?articleId=1000684>. Accessed on 2 April. 2017.

Barcik, R. & Jakubiec, M. 2012. E-logistics-aspects of functioning. *Acta academica karviniensia*,1. <http://www.opf.slu.cz/aak/2012/01/Barcik.pdf>. Accessed on 18 February 2017.

Bayles, D. L. 2001. *E-commerce logistics and fulfillment: Delivering the goods*. Upper Saddle River, NJ: Prentice Hall, pp.154-155.

Beijingbusinesstoday. 2016. Vipshop obtains benefits from e-tailing industry with special selling method. <http://www.bbtnews.com.cn/2016/0314/141858.shtml>. Accessed on 7 March 2017.

Bienstock, C.C. & Mentzer, J.T. & Bird, M.M. 1997. Measuring physical distribution service quality. *Journal of the Academy of Marketing Science* 25 (1), 31–44.

Bloomidea. 2014. Types of E-Commerce. <http://bloomidea.com/en/blog/types-e-commerce>. Accessed on 5 February 2017.

Brandimarte, P. & Zotteri, G. 2007. *Introduction to distribution logistics*. Hoboken, N.J: Wiley-Interscience. (Chapters 1-5).

Businessdictionary. Physical Distribution Definition. <http://www.businessdictionary.com/definition/physical-distribution.html>. Accessed on 3 April 2017.

Christopher, M. & Peck, H. 2003. *Marketing logistics* (2nd ed.). Oxford: Butterworth-Heinemann, pp. 1-90.

CNNIC 2016. The 38th Chinese Internet Development Situation Statistical Report- Netizen size and structure report in 2016 (2). <http://www.199it.com/archives/502874.html>. Accessed on 19 March 2017.

Cohen R. 2016. 4 Challenges of Last Mile Delivery for eCommerce. <https://www.bringg.com/blog/insights/4-challenges-of-last-mile-delivery-for-ecommerce/>. Accessed on 6 March 2017.

Ecommerce Foundation 2016. *Global B2C Ecommerce Report 2016*. [https://www.ecommercewiki.org/wikis/www.ecommercewiki.org/images/5/56/Global\\_B2C\\_Ecommerce\\_Report\\_2016.pdf](https://www.ecommercewiki.org/wikis/www.ecommercewiki.org/images/5/56/Global_B2C_Ecommerce_Report_2016.pdf). Accessed on 4 February 2017.



Gevaers, R. & Van de Voorde, E. & Vanelslander, T. 2009. Characteristics and typology of last mile logistics from an innovation perspective in an urban area. TPR: Department of transport and regional economics. University of Antwerp.

Graduate School of Stanford Business. 2016. Technological Disruption and Innovation in Last-mile Delivery <https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/vcii-publication-technological-disruption-innovation-last-mile-delivery.pdf>. Accessed on 20 January 2017.

Han, L. 2016. "Last mile" delivery problem in Chinese electronic commerce logistics and improvement method research. International Conference on Advanced Design and Manufacturing Engineering. DOI: 10.2991/icadme-16.2016.70. Accessed on 3 March 2017.

Hengliang 2016. What you should know except Alibaba unmanned delivery robot and Jingdong unmanned delivery vehicle. <http://www.leiphone.com/news/201609/GD6mccQdmW2Dt2PK.html>. Accessed on 15 February 2017.

Jain, N. K. & Gajjar, H. & Shah, B. J. & Sath, A. 2017. E-fulfillment dimensions and its influence on customers in e-tailing: a critical review. *Asia Pacific Journal of Marketing and Logistics*, 29(2), 347-369.

Kalia, P. & Kaur, N. & Singh, T. 2017. Consumer satisfaction in e-shopping: An overview. *Indian Journal of Economics and Development*, 13(2a), 569–576.

Linkshop. 2016. The development of e-tailing industry: cross-border, rural area, on-line and off-line mobile e-commerce. <http://www.linkshop.com.cn/web/archives/2016/350464.shtml>. Accessed on 6 February 2017.

Linkshop. 2016. The trend of big data in retailing industry when big data has the dominant position in this period. [http://www.linkshop.com.cn/\(kwthrmauciseeriqsdu1ui55\)/web/Article\\_News.aspx?ArticleId=347636](http://www.linkshop.com.cn/(kwthrmauciseeriqsdu1ui55)/web/Article_News.aspx?ArticleId=347636). Accessed on 4 March 2016.

National Bureau of Statistic of China. Annual statistic about Chinese economic situation. <http://data.stats.gov.cn/easyquery.htm?cn=C01>. Accessed on 3 February 2017.

National Bureau of Statistic of China. Monthly statistic about Chinese economic situation. <http://data.stats.gov.cn/easyquery.htm?cn=A01>. Accessed on 3 February 2017.

National Bureau of Statistic of China. Quarter statistic about Chinese economic situation. <http://data.stats.gov.cn/easyquery.htm?cn=B01>. Accessed on 3 February 2017.

News.163. 2015. Three directions of consumption concept change. <http://news.163.com/15/0515/04/APKL9QBM00014Q4P.html>. Accessed on 11 February 2017.

Robinson, A. 2014. E-Commerce Logistics: The Evolution of Logistics and Supply Chains from Direct to Store Models to E-Commerce. <http://cerasis.com/2014/04/30/e-commerce-logistics/>. Accessed on 13 March 2017.

Rushton, A. & Croucher, P. & Baker, P. 2010. The handbook of logistics & distribution management (4th ed.). London: Kogan Page, pp. 1-330.

Sanwen8. 2016. 2016 Intelligent retailing industry revolution. <https://sanwen8.cn/p/129qOWX.html>. Accessed on 5 February 2017.

Science.china.com 2016. Vipshop continues optimizing its logistics system, developing logistics technology and warehouse employment. [http://science.china.com.cn/2016-06/01/content\\_8808015.htm](http://science.china.com.cn/2016-06/01/content_8808015.htm). Accessed on 10 January 2017.

SearchmanufacturingERP. 2016. Reverse Logistics Definition. <http://searchmanufacturingerp.techtarget.com/definition/reverse-logistics>. Accessed on 7 February 2017.

Sell, J. 2015. How Omni-Channel Commerce Is Changing Traditional Supply Chains. <http://www.inboundlogistics.com/cms/article/how-omni-channel-commerce-is-changing-traditional-supply-chains/>. Accessed on 2 March 2017.

Shankar, V. & Smith, A. K. & Rangaswamy, A. 2003. Customer satisfaction and loyalty in online and offline environments. *International journal of research in marketing*, 20(2), 153-175.

Shi, Y. & Yang, Z. & Yan, H. & Tian, X. 2017. Delivery efficiency and supplier performance evaluation in China's E-tailing industry. *Journal of Systems Science and Complexity*, 30(2), 392-410.

Singh A. 2016. Last-Mile Delivery Challenges And Possible solutions. <http://www.singharsh.com/last-mile-delivery-challenges-and-possible-solutions/>. Accessed on 9 February 2017.

Sohu. 2015. Industry 4.0 is the revolution of the whole China. 2015. [http://www.sohu.com/a/26429178\\_114844](http://www.sohu.com/a/26429178_114844). Accessed on 9 August 2015.

Sohu. 2016. The change of consumption Concept. [http://www.sohu.com/a/67351316\\_399092](http://www.sohu.com/a/67351316_399092). Accessed on 22 December 2016.

Tarn, J. M. & Razi, M. A. & Wen, H. J. & Perez Jr, A. A. 2003. E-fulfillment: the strategy and operational requirements. *Logistics Information Management*, 16(5), 350-362.

- Techopedia. Business-to-Consumer Definition. <https://www.techopedia.com/definition/1424/business-to-consumer-b2c>. Accessed on 14 February 2017.
- Tech.hexun. 2016. "Internet plus" period: the new opportunity and trend of development of E-commerce. <http://tech.hexun.com/2016-06-14/184380374.html>. Accessed on 8 March 2017.
- Tech.qq.com 2017. Vipshop earns net revenue of 8020 80.2 million US dollars with 6.3% growth. <http://tech.qq.com/a/20170516/005340.htm>. Accessed on 16 May 2017.
- Tech.163. 2016. How VR technology change the "retailing industry"? <http://tech.163.com/16/1218/15/C8J36TGE00097U7U.html>. Accessed on 18 December 2016.
- Tisi. 2015. Understanding and prediction of the "Internet plus" era. <http://www.tisi.org/Article/lists/id/4188.html>. Accessed on 6 February 2017.
- Tmall.com. Introduction. <http://about.tmall.com/#place>. Accessed on 23 March 2017.
- Turban, E. & King, D. 2003. Introduction to e-commerce. Upper Saddle River (NJ): Pearson Education, pp. 1-20, pp. 93-110.
- Vaast M. 2017. Chinese E-Commerce Market Growth Statistics' Report 2016. <https://www.ecommerce-nation.co/chinese-ecommerce-market-growth-statistics-report-2016/>. Accessed on 21 February 2017.
- Vipshop.com. Home. <http://ir.vip.com/phoenix.zhtml?c=250900&p=irol-irhome>. Accessed on 18 May 2017.
- Vipshop delivery service. <http://help.vip.com/themelist.php?type=detail&id=345>. Accessed on 8 March 2017.
- Vip.com. The customer advantage. <http://ir.vip.com/phoenix.zhtml?c=250900&p=irol-ourservices>. Accessed on 8 March 2017.
- Vipshop self-built logistics system. 2017. <http://www.bbtnews.com.cn/2017/0518/193869.shtml>. Accessed on 18 May 2017.
- Vipshop seven days no-reason product return principle. <http://help.vip.com/commitment.php>. Accessed on 9 March 2017.
- Worldometers. 2017. China Population. <http://www.worldometers.info/world-population/china-population/>. Accessed on 20 May 2017.

## Appendix A

# Customer service in Chinese B2C e-tailing platform

Hello everyone, thank you for your response in advanced. I am a Chinese student studying International business at Saimiaa University of Applied Sciences in Finland. I am doing my thesis survey about customer services in B2C e-retailing platform in Chinese market. The survey includes 11 questions and asking your online shopping experiences in order to analyzing the most influenced elements for customer preferences in distribution process. This will just take few minutes and really thank you for your help!

\* Required

### 1. Gender

- Female
- Male

### 2. Age

- < 17
- 18-27
- 28-40
- > 40

### 3. Profession

Your answer \_\_\_\_\_

### 4. How often you purchase goods on the B2C online platform?

- One time a week
- Few time a week
- Few time a month
- Few time a year

5. Which online platform you mostly like?

- Vipshop
- Tmall
- JingDong
- Other: \_\_\_\_\_

6. Based on the question 5, please choose 4 factors you think are most important to make you choose the B2C platform and then choose how many percentages of them will influence your decision-making?

	< 40%	40%-60%	> 60%
Well designed online shopping site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear product differentiation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Genuine (real product)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low product price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy order process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low post fee/free delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy customer communication service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quick& accurate question solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safe& well quality of packing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
plenty of stock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

accuracy of invoice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
high level of security and safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Short delivery time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High quality of courier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easy product return	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
easy and diverse payment method	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
useful customer comments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. For delivery time, how long time you can bear for common products? (too long distance or special products not includes)

- less then one day
- less than 2 days
- less than 3 days
- Other: \_\_\_\_\_

8. How influential the "other customer's comments" in your purchasing decision-making , please choose the scale from 1-5

	1	2	3	4	5	
has not influential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	has significant influence

9. How often you usually check the parcel tracking information?

	1	2	3	4	5	
rarely checking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	checking nearly every time

10. Which payment method you prefer

- Freight collected
- credit card/debit card
- Alipay
- online bank
- Other: \_\_\_\_\_

11. what is the most usually way for you to picking up your parcel

- home delivery service by courier
- pick up parcel from nearest local node (near your residential location)
- from intelligent parcel locker
- Other:

## Appendix B

### 中国b2c网络零售业 客户服务调查

非常感谢您的参与！我是徐淼儿，现在就读于芬兰赛马应用科技大学，国际贸易专业。这份问卷调查是我毕业论文研究的一部分。这份问卷是匿名调查，并不会涉及您的隐私。问卷共有12个问题，希望通过了解网购顾客的经历去分析出在分销供应链中，哪个环节是最被客户所重视的。问卷问题非常简单，只会占用您几分钟时间，非常希望并感谢您回答！

1. 性别

- 女
- 男

2. 年龄

- < 17岁
- 18-27岁
- 28-40岁
- > 40岁

### 3. 职业

您的回答 \_\_\_\_\_

#### 4. 您多久会在b2c 网购平台上购物？

- 一个星期一次
- 一个星期多次
- 一个月几次
- 一年几次

#### 5. 您最喜欢用哪个网购平台？

- 唯品会
- 天猫
- 京东
- 其他: \_\_\_\_\_

#### 6. 根据问题5您的选项，请您选择4项您认为选择b2c 网购平台的最重要的因素，然后在后面选择它会怎么影响你的是否购买商品？

	< 40%	40%-60%	> 60%
网站设计优秀	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
清楚的商品分类	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
真货	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
商品价格低	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
简单的下单流程	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
运费低/免运费	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
简单方便的客服服务	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



简单方便的客服服务	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
快速准确的解决问题	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
安全质量好的商品包装	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
足够的库存	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
准确的发货单	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
安全保密性能高	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
到货时间短	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
高素质的送货员	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
方便的退货退款	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
简单并且多样的付款方式	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. 您最多能忍受多长时间收到货物？

- 少于一天
- 少于两天
- 少于三天
- 其他: \_\_\_\_\_

8. “客户评价”对您的购买决定有多少影响？请选择1-5选项中的一个

	1	2	3	4	5	
几乎没有影响	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	有很大的影响

9. 您多久会看一次包裹追踪信息？请选择1-5 选项中的一个

	1	2	3	4	5	
基本不看	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	非常频繁的查看

10. 您喜欢哪种付款方式？

- 货到付款
- 信用卡/储蓄卡
- 支付宝
- 网上银行
- 其他:

11. 您最常通过哪种方式领取包裹？

- 送货上门
- 附近的包裹站领取
- 智能包裹柜领取
- 其他: \_\_\_\_\_