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A CUSTOMER SATISFACTION RESEARCH OF B2C ONLINE PURCHASING SERVICES IN CHINA

-Case Company JD.COM

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In recent years, with the development of e-commerce industry, online shopping has gradually become more and more popular among consumers in China, especially for the younger age groups. As a result, the competition among the e-marketers becomes continuously fierce in the e-commerce industry.

The main objective of this thesis was to provide relevant information about internet consumers’ opinions on online purchasing services in Chinese e-commerce companies, especially the case company JD.com, as it is one of biggest B2C e-commerce platforms in China. In this way the e-marketers can have a better understanding of their customers’ preferences and opinions, and then know about how to improve their customers’ satisfaction level in order to compete better in e-commerce.

In order to have a thorough understanding of this topic, the theories of e-commerce, consumer behavior, and customer satisfaction were presented in the theoretical part of the study. The research method used was quantitative research, which was based on a questionnaire form and sent to the respondents over the Internet.

The empirical study illustrates the results statistically based on data collection of respondents’ questionnaires. After that, solutions to deal with the research problems and suggestions for the case company were presented at the end of the thesis.

Keywords   E-commerce, Customer Satisfaction, Purchasing Services, China
Viime vuosina, verkkokauppa-alan kehittyessä, verkkokaupankäynti Kiinassa on tullut vähitellen yhä suositumaksi kuluttajien keskuudessa, erityisesti tämä näkyy nuoreessa ryhmässä. Tämän tuloksena kilpailu verkkokauppa-alalla e-markkinoijien keskuudessa tulee olemaan jatkuvasti kovaa.

Tämän opinnäytetyön päätavoitteena on tarjota asianomaista tietoa Internet-kuluttajien mielipiteistä verkko-ostopalveluiista kiinalaisissa verkkokauppayrityksissä, etenkin kohdeyritys JD.com:ssa, sillä se on yksi Kiinan suurimmista B2C-verkkokauppa-alustoista. Näin e-markkinoijat voivat saada parempaa tietoa heidän asiakkaidensa mieltymystä ja mielipiteistä sekä tietää, miten parantaa heidän asiakkaidensa tyytyväisyysastetta voidakseen kilpailla paremmin verkkokauppa-alalla.

Jotta aiheesta saa perusteellisen käsityksen, verkkokauppa-, kuluttajakäyttäytymis- ja asiakastyytyväisyysteorian esitetty teoreettisessa osassa. Tutkimusmenetelmänä on kvantitatивinen tutkimus, joka perustuu Internetin kautta vastaajille lähetettyyn kyselylomakkeeseen.

Empiirinen tutkimus havainnollistaa tilastollisesti tuloksia, jotka perustuvat vastaajien kyselyiden tiedonkeruuseen. Tämän jälkeen ratkaisuja tutkimusongelmien käsittelyyn ja ehdotuksia kohdeyritykselle esitetään opinnäytetyön lopussa.

Avainsanat: verkkokauppa, asiakastyytyväisyys, ostopalvelut, Kiina
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1 INTRODUCTION

The first chapter of this thesis starts with the general introduction of the topic, which presents the background of the study, including a short text describing the current development situation of Chinese electronic commerce. Then an explanation concerning the research problem and objectives will be described in order to present the aim of the thesis. In addition, the limitations of this research will be discussed in this chapter. At the end of the chapter, the structure of the thesis will be shown in the form of flow chart, which is helpful for understanding the topic more easily.

1.1 Background of the Study

In recent years e-commerce industry has developed rapidly in China. With the continuous expansion, there are a lot of e-commerce related companies emerging in the market including the e-commerce information, transaction and technology services companies.

During the process of Chinese e-commerce industry develops, there exists some typical geographical characteristics. The southeast coast areas are well developed in terms of e-commerce industry, meanwhile the northern and central part is still in the phase of rapid development, and the West is relatively backward.

Since 2005, the turnover of Chinese e-commerce market transactions has steadily grown, and it achieved a great breakthrough of 1.7 trillion RMB in 2007. In the following three years, the investment scale of e-commerce industry was continuously increased, and the Chinese e-commerce market also met a new round of investment climax. (EU SME Centre 2012)

1.1.1 Current Chinese E-commerce Industry

According to the data from Chinese E-commerce Research Center, the turnover of Chinese e-commerce transactions had achieved significant continuous increases from 2009 to 2013, which is shown in the following Figure 1.
As shown in Figure 1, in 2010, the overall turnover of the Chinese e-commerce market reached 4.5 trillion RMB, increasing by 22% comparing with that of 2009. The overall turnover of Chinese e-commerce transactions in 2011 increased to 5.88 trillion RMB, among which the small and medium enterprises accounted for 3.21 trillion RMB. (China Sourcing 2013)

In addition, by the end of 2012, the overall turnover of Chinese e-commerce transactions amounted to 7.85 trillion RMB, with a 30.8% increase comparing with that of 2011. In 2012, the turnover of e-commerce in China already accounted for 15% of the total GDP in China. (China Sourcing 2013)

Meanwhile, in 2012, the turnover of Chinese online retailing market transactions (including B2C and C2C) exceeded 1 trillion RMB, reaching 1.2594 trillion RMB, with an increase of 66.5% compared with that of 2011, and accounted for 6.1% of the total retailing sales amount, as shown clearly in Figure 2 below (China Internet Network Information Center 2013):
As shown in Figure 2, the total e-commerce retailing sales amount in 2007 was 54.2 billion, which increased to 120.8 billion in 2008. From 2008, though the growth rate continuously declined from 122.9% to 44.6% in 2011, the total e-commerce retailing sales amount always kept a significant increase. In the year 2011, the online retailing market transactions reached 756.6 billion RMB, with an increase of 44.6% compared with that of 2010. (China Internet Network Information Center 2013)

Today, there are forms of nearly stable pattern among the 20-40 year-olds who are getting accustomed to purchasing what they need online. Due to the continuously increasing population and consumer group structure in China, the overall turnover of e-commerce transactions is predicted to grow continuously and steadily in the future.

In addition, with the expansion of e-commerce industry, it will directly contribute to the development of logistics, finance and IT industries, which will create more working opportunities in China. In addition, the industry will also drive the rapid development of related e-commerce service areas, such as third-party payment, electronic authentication, network information security, Internet insurance etc.
1.1.2 Introduction of JD.COM

Launched in July 1998, JD.com or jingdong Mall, formerly 360Buy, is a Chinese electronic commerce company with headquarters in Beijing, China. In 1998 Jingdong was still a company that sold magneto-optical products in Beijing, and its B2C site went online as jdlaser.com in January 2004. After almost 15 years later, it has become one of the biggest 3C (computer, communication and consumer electronic) e-commerce platforms in the Chinese B2C e-commerce industry. (JD.com 2014)

As one of the largest B2C online retailers in China, JD.com started as an online magneto-optical store, but soon diversified to sell electronics, mobile, computers, etc. Besides the Chinese market, it ships to 82 countries and regions in the world, including America, Canada, France, Germany, Australia, and Southeast Asia. (JD.com 2014)

JD.com ’s main sales channel is the online retailer shop, where customers are able to purchase products by placing an order on the website or by mailing a telephone call. In addition, there are three ways for payment in JD.com e-commerce platform’s websites: paying online, paying after the arrival of product or picking up by yourself. (China Internet Network Information Center 2013)

There are three main links in JD.com retailing industry chain, which includes procurement, payment and distribution. During the process, the wholesalers supply products to JD.com e-commerce platform, and in the meantime the retailers will also build their own online shops in this platform to make promotions. By searching for the products on the website, customers can choose what they need from a wide selection of authentic products at low prices and then decide a way of payment. After that the ordered product will be delivery to the end consumer. (JD.com 2014)

In terms of transaction volume, JD.com kept continuously increasing from 2010 to 2012, which is clearly shown in Figure 3.
As shown in Figure 3, in the first quarter of 2010 the total sales amount in JD.com was 1.68 billion RMB, and after that it kept increasing to 13.585 billion RMB in the second quarter of 2012. During the process the growth rate of sales volume peaked at 195.6% in the second quarter of 2011, then declined to 102.5% in the second quarter of 2012. Overall, the total sales volume of JD.com was kept increasing from the first quarter of 2010 to the second quarter of 2012.

1.2 Research Problem and Objective

As the introduction of the background study, e-commerce has developed very rapidly in recent years in China. With the expansion of the e-commerce market and an increasing population of internet consumers, there may exist some problems during customers’ online purchasing processes, which influence their impressions and attitudes towards online shopping.
This thesis aims to gain basic knowledge of customers’ online purchasing experiences in China, and more importantly, taking JD.com as a case company to survey internet customers’ satisfaction with their online shopping experiences in terms of related services during the purchasing processes.

The objective of the research is to investigate the customers’ opinions towards purchasing services at JD.com in terms of quality, price, delivery services and aftersales services, and additionally opinions towards the website design, payment security and other related e-commerce services. In this way, the study can help the marketer in gaining a better knowledge about their customers’ thoughts and preferences on the related factors during the online purchasing process, with the purpose of improving the customer satisfaction.

In order to achieve the main purpose, the following research questions are set:

1. What is the major consuming group of online shopping in China?
2. What are the most important factors that influence internet consumers’ decision-making during the online purchasing process?
3. What do the customers think about JD.com and its purchasing services in terms of quality, price, delivery time, payment security and other factors?
4. What are main difficulties or inconveniences that customers have been faced when purchasing online at JD.com?

1.3 The Limitations of the Research

This research will be conducted among online customers in China who have purchasing experiences at JD.com. Due to the limitations of time and place, it is hard to collect data from a large and wide range of respondents who have online shopping experiences at JD.com. Thus, the results cannot represent all online customers’ opinions towards JD.com due to the limited number of respondents in China.

Additionally, another limitation involved in this research is that the data is
collected among customers through an online questionnaire. This means the research results are only yield customers’ perspectives, and lacks of the opinions and information from the e-commerce companies.

1.4 Thesis Outline

This thesis is divided into six chapters, which can be shown by the thesis flow chart in Figure 4. The first chapter is the introduction. Then, in the second and third chapter, the theoretical ground of this study is illustrated. In the fourth chapter, based on the theoretical study, customers’ opinions towards the case company are discussed. Then, the empirical research and findings are described in the fifth chapter, and at last, chapter six discusses the research and gives some suggestions for the companies based on the empirical findings.

**Figure 4.** The flow chart of the thesis

In addition, the general introduction of each chapter in the thesis is illustrated in more details in Figure 5.
As shown in Figure 5, there are mainly five parts of this thesis, including introduction, theoretical part, research methodology, empirical finding and conclusion.
2 ELECTRONIC COMMERCE

This chapter focuses on building the theoretical foundations of electronic commerce (EC) in this thesis. Firstly, an overview of EC along with its related basic concepts is introduced. In addition, the benefits and limitations of electronic commerce are presented. Secondly, the electronic commerce explosion in China together with its main e-commerce market and three main e-commerce business models are also discussed in this chapter.

2.1 Overview of Electronic Commerce

E-commerce is gradually becoming a fundamental way of processing transactions between buyers, sellers, and suppliers worldwide, which adapts to the current global business environment requirements (Coulson 1999). The global business environment is increasingly competitive, and also customers have much higher requirements for the delivery time of goods and services (Craig Fellenstein & Ron Wood 2000, 2). Under these circumstances, the demands and popularity of e-commerce are becoming more and more obvious and significant.

E-commerce refers to a type of industry where the buying and selling of products or services is conducted over electronic systems such as the Internet and other computer networks (Sauer 2000). In the process of e-commerce development, information technology was played a significant role, which provides support by Internet, e-mail, mobile devices, social media, and smart telephones as well. (See Ferguson 1999)

In general, e-commerce is a very diverse and interdisciplinary topic, which includes the issues ranging from e-technology to consumer behavior, studied by computer experts, behavioral scientists and marketing research experts. (See Grover & Ramanlal 2000)
2.1.1 Definition of EC

As an emerging concept, electronic commerce can be defined as “the process of buying and selling or exchanging of products, services, and information via computer networks including the Internet”. (Kalakota & Whinston 1997)

From the scope perspective, e-commerce can be described as the Parties take electronic trading to conduct business transactions rather than any other forms such as face-to-face exchange or direct interviews. (Zhou 2008)

From the technical perspective, e-commerce can be described as a collection of multi-technology, including the exchange of data (such as electronic data interchange, electronic mail), obtaining data (such as shared databases, electronic bulletin boards) and automatically capturing data (such as bar code). (Zhou 2008)

Electronic commerce generally refers to a wide range of business under the support of information technology. Buyers and sellers conduct various business activities without actual meeting in real life, achieving the purpose of online transactions, online electronic payments, a variety of business activities, financial activities and activities related to integrated services. In addition, transactions through electronic commerce platforms, it can reduce the product cost, shorten the product life cycle, accelerate customer response and increase product quality. (Turban, Lee, King & Chung 2000)

The concept ‘e-commerce’ is very similar to ‘e-business’, and even sometimes E-commerce and E-business could be used interchangeably. As Fellenstein and Wood stated, electronic commerce is the use of online facilities, which enables buyers to communicate with seller for doing business. However, Andam (2003) and Kamel (2006) argued that although these two concepts above were very similar and even interchangeable, there still exist some small differences between these two concepts. In general, the concept ‘e-business’ is broader than ‘e-commerce’.
2.1.2 Benefits and Limitations of EC

There is no doubt that the development of e-commerce has an extraordinary impact on the business world, due to its obvious benefits for both traders and buyers comparing with the carrying out traditional means of commercial activities. However, during the development process of e-commerce, there still exist some limitations. (Kuzic, Fisher & Scollary 2002)

2.1.2.1 Benefits of EC

Clinton and Gore (1997) pointed out electronic commerce is a significant innovation, which encompasses many potential benefits, divided into benefits to organizations, individuals, and society.

For organizations, EC helps them to expand the marketplace to national and international markets. In an EC business, a company can easily and quickly locate more customers, the best suppliers, and the most suitable business partners worldwide with a minimal capital. (Hannon 1998)

Unlike the physical stores, which are limited by the geographical area, EC companies can provide their services in a broader market. With an ecommerce website, the whole world can become the potential market. Additionally, e-commerce can contribute to save cost, which can be reduced in so many aspects such as advertising and marketing, salaries, and real estate costs. (See Khurana 2014)

At the same time, the emergence of electronic commerce has significantly changed the customer’s life. Surfing on an e-commerce website which can provide comparison shopping, customers can locate products more quickly instead of traveling to a physical store, which can also eliminate travel time and cost for customers. Additionally, compared with physical equivalents, electronic commerce makes deals, bargains, coupons, and group buying much more convenient. As e-commerce industry expands, the competition among
organizations becomes increasingly fierce, and as a result organizations can provide more substantial discounts for customers. (Coulson 1999)

Differently from physical stores, e-commerce websites can remain open all the time, which can satisfy customers’ needs maximally and increases the number of companies’ orders. (See Czerniawska & Potter 1998) Moreover, electronic commerce allows customers who doubt the quality of products to interact with other customers in electronic communities and exchange their shopping ideas as well as compare experiences (See Turban et al. 2000, 16). Old customers’ shopping review comments have already become one of the most important and determined indicators which affect the final buying decisions of customers. (Coulson 1999)

From society’s point of view, electronic commerce enables customers not to travel a long distance to reach the physical stores, thus less traffic on the roads and lowering air pollution. In addition, e-commerce allows merchandise to reduce cost of products so less affluent people can also afford the products and increase their standard of living. (Czerniawska et al. 1998)

Moreover, e-commerce enables access to services and products to the Third World countries and rural areas that otherwise are not available to them. For the governments e-commerce facilitates the delivery of public services like health care, education, social services at a reduced cost and improved quality. (See Turban et al. 2000, 16)

2.1.2.2 Limitations of EC

The disadvantages of EC can broadly be grouped into two major categories of technical and nontechnical categories.

During the process of e-commerce industry development, there have existed so many technical limitations, such as the lack of system security, reliability, standards as well as some communication protocols owing to the poor
implementation of e-commerce (Fraser et al. 2000). Also, the software development tools are still evolving and keep changing rapidly. Sometimes it becomes difficult to integrate the Internet and EC software with some existing applications and databases (Tutorialspoint 2014). Some EC software does not fit with some hardware, or may be incompatible with some operating systems or other components (Turban et al. 2000,16).

In addition, the nontechnical limitations also impact the development of e-commerce. The cost of building e-commerce in-house can be very high, and sometimes the mistakes can lead to huge loss due to the lack of experience. In many cases, customers want to see or touch the real product before purchase. However, e-commerce does not make this possible. So it may be difficult to make the user switch from physical to virtual stores, because customers do not trust an unknown faceless seller, paperless transactions, or electronic money. (Hoffman, Novak & Perlata 1999)

It is difficult to ensure security or privacy on online transactions. For EC industries, it is a very long and difficult task of convincing customers that online transactions and privacy are very secure. (Fraser et al. 2000) For customers living in remote areas, internet access is still inconvenient to use and not a cheaper choice, which make e-commerce lose many potential customers. (Tutorialspoint.com 2014) In the e-commerce environment many legal issues are not resolved, and moreover, government regulations and standards are not refined enough for many circumstances. (Turban et al. 2000,16)

Despite the fact that there are many limitations in e-commerce, they will be overcome as time passes. The ratio of EC benefits to costs will increase as experience accumulates and technology improves, which results in a greater rate of EC adoption. (Tan 2013)

2.1.3 Driving Forces of E-commerce

According to a survey in the web, in the year 1995 there were total 18 million
online users in the Canada and U.S. And then after four years, the number of internet users had soared to 92 million in 1999. (Principal & Practice of Medicines’ Blog 2012) As the e-commerce develops so rapidly, it is worthwhile to examine today’s business environment and explore the drivers of e-commerce. (Hoffman et al. 1999)

In today’s highly competitive business environment, business pressures can be divided into three categories: market, societal and technological (See Figure 6). In addition, these factors can change quickly in an unexpected way, so it is vitally important for companies to react frequently and quickly to possible problems and opportunities, producing service more and faster with fewer resources in the new business environment. (See Turban et al. 2000, 18)

**Figure 6.** The Major Business Pressures and the Role of EC (Turban et al. 2000)

Figure 6 demonstrates a model of the new world of business, among which
business pressures, organizational responses and e-commerce are shown. Business
drivers create pressures from market, societal and technological aspects on
organizations, which lead the organizations to respond with activities under the
support of IT and electronic commerce.

Market and economic pressures mainly come from the strong competition in the
e-commerce industry, and also the globalization of economy in the world.
Meanwhile, the societal and environmental pressures come from government
deregulations, shrinking government subsidies and rapid political changes, driving
the development of e-commerce (See Raj Computers 2012). In addition, the rapid
technological obsolescence, increased innovations and new technologies,
information overload, digital convergence and other technological pressures also
provide a good opportunity for the development of e-commerce (Peh 2012).

2.2 E-commerce in China

In fact, ten years ago, it was still very difficult to forecast China’s path to
e-commerce leadership. In 2000, China had only 2.1 million internet users and
had yet to develop any e-commerce applications. At that time, though the payment
systems and physical delivery mechanisms which are used to facilitate the
development of e-commerce transactions were already well developed in other
countries, they were still lacking in China. (EU SME Centre 2012)

However, with the time going by, Chinese internet users had approached 600
million by the end of 2013, with the e-commerce revenue growth topping 70%
compounded annually from 2009 to 2012. (KPMG 2014) In China, the increased
large number of customers mainly consists of middle-class who have become
accustomed to making frequent online purchases. During these years, China has
gradually exceeded the US market and become the largest e-commerce market in
the world. (Walters, Kuo, Jap & Hsu 2011)

In China the incredible growth of e-commerce should be closely connected to an
increasing sophistical ecosystem (Hoffmann, Lannes & Dai 2012). This
well-designed ecosystem includes user-friendly online trading, payment and delivery service decrease in the time that the products travel from the seller to the online buyer as shown in Figure 7:

**Figure 7.** E-commerce ecosystem in China is becoming more sophisticated with full set of “enables”(Bain analysis 2012)

From this Figure 7, we can see that China’s e-commerce platforms easily support both B2C and C2C transactions. During the process from manufacturer to customer, there are four major parts, which consist of the e-commerce ecosystem: sourcing, online platform, payment, and delivery. For the sourcing part, in China, the large internet retailers usually have three choices, including producers, third-party distributors and agents. As can be seen from Figure 6, there are about 85% of online customers choose online payment options, which means the online shopping process becomes easier and more reliable. (See Hoffmann et al. 2012)

### 2.2.1 Chinese E-commerce B2C Market

In China there are some domestic e-commerce players that occupy a sizable share of the Chinese e-commerce market, but actually get a greater number of
transactions than some better-known global competitors, one of those is Alibaba. Though Alibaba is not well known outside of China like Amazon or EBay, the company actually dominates the B2C and C2C e-commerce markets in China. According to a KPMG report in 2014, the total value of merchandise sold in Alibaba was greater than that of EBay and Amazon combined in 2012. (See KPMG 2014) Except for Alibaba, there are still some other competitors that hold a large B2C e-commerce market share, such as JD.com, Gome and Sunning as shown in Figure 8.

![B2C e-commerce by vertical (2010, RAM 8)](image)

**Figure 8.** B2C e-commerce players are fairly specialized by vertical (Bain analysis 2012)

As shown in Figure 8, there are ten major competitors occupying a total 80% of the market share. In B2C market, there are three main categories offer the most significant growth, including electronics, home appliances and cosmetics. For example, focused on electronic items, JD.com occupies almost 15% of the B2C market. (See Hoffmann et al. 2012)

### 2.2.2 Three Main E-commerce Business Models in China

E-commerce business models are fundamental methods which show how an e-business makes money online. Today, there are mainly three e-commerce business models utilized in Chinese e-commerce market today, which will be
described in the following.

2.2.2.1 Business-to-Business (B2B) Model

Business-to-Business e-commerce is simply defined as e-commerce between companies, which means this is the type of e-commerce that deals with relationships between and among businesses. The B2B model (see Figure 9) shows the transaction process between organizations, in which way the cost can be saved and efficiency can be improved. (Lee 2001)

![Figure 9. B2B Business Model](image)

Figure 9 clarifies how business is conducted in a B2B e-commerce model. At first, the buyer company browses websites and chooses the most suitable seller company. Then, it can request for more information about the seller and place an order to make its final decision. After the seller organization gets the order details, the order will be confirmed, and then the payment procedure will be settled. At last, the buyer sends an acknowledgement of payment to the seller and the delivery details will be decided between the two organizations. (See e-commerce Models 2014)

In China there are many famous and successful B2B e-commerce platforms, such as Alibaba.com, and hc360.com. These websites follow B2B models to conduct their online transactions between the organizations. (Lawrence et al. 1998)
2.2.2.2 Business-to-Consumer (B2C) Model

B2C e-commerce is basically a concept of online marketing and distribution of products and services between organizations and consumers via internet. In a B2C model (see Figure 10), internet consumers go to the website at first, and then place an order which will be sent to business company. After receiving the order, the organization start to dispatch goods to the consumer. The transaction process of B2C business model is shown in the following Figure 10. (Tutorialspoint 2014)

![B2C Business Model](image)

**Figure 10.** B2C Business Model (e-commerce Models 2014)

As shown in Figure 10, in a B2C business model, at first the business company displays and sells products on the B2C website, where the detailed information of products are contained in the catalogs. Then the consumer can log on to this website where he can get the detailed information about the price, availability, discounts of the products and then compare with one another and make his final decision. Finally, the consumer can place an order for his ideal product on the website. In addition, the consumer has to specify his personal credit card information before he places an order. At last, the order information is then validated by the website and stored in their database, and the products will be dispatched to the consumer. (Lawrence et al. 1998)

Today there are many popular and typical B2C e-commerce platforms in China including JD.COM, tmall.com and VANCL (Baidu Encyclopedia 2014). In fact, B2C e-commerce often meets challenges about security threats. In this platform, consumers have to provide their credit card and personal information to the website, which makes customers doubt the security of their information. Thus, it
is vitally essential for the B2C e-commerce platforms to guarantee the security and privacy of internet customers’ information. (Mahadevan 2000)

2.2.2.3 Consumer-to-Consumer (C2C) Model

C2C e-commerce can be defined as a business model that provides a trading platform where customers can conduct business with each other. (Investopedia 2014) This C2C e-commerce platform makes it possible for consumers to advertise and sell their products online directly to consumers, as shown in Figure 11 below. (Mahadevan 2000)

![C2C Business Model](image)

**Figure 11.** C2C Business Model (e-commerce Models 2014)

As in Figure 11, in a C2C e-commerce model, a customer interacts with the C2C web site to express his sales plans, so that the C2C web site acts as a medium during the online transaction business. The seller can show his products on the web site, which in turn charges him for this. After that, the buyer can search for the product which he is interested in by browsing the website. The buyer can place an order to the website, if he decides to choose a product, and then the C2C website will purchase the product from the seller and sell it on to the buyer.

Currently, there are mainly four leading C2C e-commerce platforms dominating the Chinese C2C industry, which are Taobao.com, eachnet.com, paipai.com and youa.com. In fact, most successful websites do not adopt just one of these models to open their business, instead they utilize a combination of the e-commerce models to develop greater success. (Ecommerce web hosting guide 2014)
3 ONLINE CUSTOMER SATISFACTION

In this chapter a wide variety of research will be used to illustrate the online customer satisfaction. In the first part the consumer behavior is together with the explanation of internet consumer behavior model and buyers’ purchasing process. Then customer satisfaction and online purchasing services are explored in the second part.

3.1 Consumer Behavior Analysis

Electronic commerce consumers can be classified into two types, which are individual customers and organizational consumers. Organizational consumers include governments, private corporations, resellers and public organizations, whose purchasing is used to create other products by adding value to the products instead of personal consumption. (See Turban et al. 2000, 74)

Zaltman and Wallendorf (1979) stated that marketing managers rely on consumer behavior models of how individual purchasing agents act in the market place, and then test in the marketplace based on that. With the internet consumer behavior model, e-marketers can make its marketing strategies according to the related internet consumer behavior theories.

3.1.1 Internet Consumer Behavior Model

Consumer behavior is defined as “the act of individuals directly involved in obtaining and using consumer goods and services, which also includes the decision process that precedes and determine these acts” (Sartaj 2010). The following electronic commerce consumer model summarized the market researchers’ findings for many years (see Figure 12).
According to this EC consumer behavior model, the purchasing decision process is basically a customer’s reaction to stimuli, which includes the marketing factors and some other factors related to economical, technology, political and cultural context. Moreover, the process of customer’s reaction is influenced by the customer’s personal characteristics, environment, logistics, technical factors and customer service, which are clearly shown in the Figure 12.

As shown in Figure 12 shows that the personal characteristic factors mainly involve the following variables: age, gender, ethnicity, education, lifestyle, psychological factors, knowledge, values and personality.

The environmental factors can be grouped into four categories of social variables, cultural variables, psychological variables, and other environmental variables such as available information, government regulation, legal constraints and situational factors. (See Turban et al. 2000, 74)

In addition, the vendors’ controlled system also affects internet consumer’s
purchasing decision, including the logistic support, technical support and customer service, which are related to the factors of payments, delivery, website design and intelligent agents.

3.1.2 Buyer’s Purchasing Process

According to Kotler and Armstrong (1991), there exist five roles that people play in a decision-making process: initiator, influencer, decider, buyer and user. The initiator refers to a person who first suggests buying a particular product or service, and then the influencer gives some advice that may carry weight to some extent in making the final buying decision. The decider, who makes a buying decision or any part of it, makes the buyer to make the actual purchase. Finally, the user is the person who consumes the products or services. (See Turban et al. 2000, 81)

The purchasing decision-making process can be divided into five distinct phases as shown in the following Figure 13.

![Figure 13. The buyer Decision-Making Process (DataMart Direct 2012)](image)

As shown in Figure 13, the buyer decision-making process can be generally grouped into five stages: need recognition and awareness, information search, evaluation of alternatives, purchase and post-purchase evaluation. For the e-commerce platforms, it is very important to use these five phases of purchase process to move the customers on in the purchasing process successfully. (Chaston 2001, 25)

At the beginning of the purchasing process, as a crucial catalyst, need is an important determinant that drives customers to buy products or services. This is also the reason why many e-commerce companies spend vast sums of money on
promotions. (Chaston 2001, 25)

After an individual recognizes that he has the demand for a particular product, he will enter the information search phase. In this phase, the e-commerce platform should guarantee all the information that is required can be delivered through its electronic platform (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer& Wood 1997). During the information gathering, the Internet offers consumers extensive benefits. (Bakos 1998)

Moreover, except for the sources from the e-commerce website, an individual can also acquire information through the personal sources, commercial sources, public sources and experiential sources. (See Jain 2012)

At the third phase of the purchase process, the potential customer has to evaluate the various alternatives available in the market. During this phase, an individual tries to compare the gathered information and then make his best option. Before the advent of e-commerce, it is a very time-consuming process for the customers to evaluate the product, for they had to visit different shops and review a variety of brochures. Now the customer can go to the website directly to get vast amounts of data through which to make comparisons of product and service. (Chaston 2001, 27)

After finishing the evaluation of products or services, the potential customers can make the final purchase decision. Sometimes it is very challenging for the supplier to persuade customers to accept an on-line transaction. (See Jain 2012) The common way to solve this problem is to offer a variety of platforms to handle customer responses, which includes mail, fax, e-mail and a web presence.

The last phase of the purchase process is post-purchase evaluation, which means the analysis of individuals for the product or service that they get, such as whether the product fulfills his need or not, and whether the product is beneficial to him or not. (See Jain 2012; Turban et al. 2000, 82)
3.2 Online Customer Satisfaction

Anderson and Srinivasan (2003) stated that customer satisfaction is vitally crucial for building up customer loyalty, and meanwhile it is one of the most important consumer reactions in online shopping.

According to Reichheld and Schefter (2000), improving customer satisfaction can help a company to increase its market share and profitability. (See Cheung & Lee 2005) In order to investigate customers’ satisfaction in electronic commerce, researchers have taken different approaches and studied many related aspects. Some researchers pay attention to the website related factors, such as security, website design and logistical support. These insights contribute to identifying features of online stores and building customer satisfaction. (Szymanski & Hise 2000)

3.2.1 Internet Consumer Satisfaction Model

A fundamental understanding of factors impacting online customer satisfaction is vitally important for e-commerce (McKinney, V., K. Yoon & F. Zahedi 2002). As is mentioned before (see Figure 13), there are five stages during the online purchasing process, including need recognition and awareness, information search, evaluation of alternatives, purchase and post-purchase evaluation.

During these five stages, it may involve in so many factors in terms of price, quality, variety, website, security, delivery and other related factors. These factors can be generally grouped into four categories of product, website, customer service, and delivery, which are shown in the following Figure 14.
As shown in Figure 14, the factors that influence customers’ satisfaction are divided into four categories. For the category ‘product’, it is mainly illustrated from the aspects of merchandising, product value and customization. Similarly, the ‘website’ includes in security, privacy and usability. Still, the ‘category’ delivery is discussed from aspects of time, price and after-sale services.

In the following part of this chapter, the related theories are illustrated based on this model.

### 3.2.2 Product Factors

According to Szymanski & Hise (2000), merchandising can be defined as “the factors associated with selling offerings online separate from site design and shopping convenience”. This includes product information available online and the product offerings. (See Ranjbarian, Fathi & Rezaei 2012)

Jarvenpaa and Todd (1997) illustrated that though the breadth of stores on the
internet impressed consumers, they still felt disappointed with the variety of products. From the perspective of merchants, who thought that they have already provided a wide variety of products and selections for their customers, but actually customers expected more due to the access of the internet and the potential to track down the status of goods and services. (Schaupp & Bélanger 2005)

The product value can be defined as “an assessment of the worth of a good or service”. In general, the product value is related to the two factors: product cost and product quality, which are also the major factors for e-commerce success. As the standard of product or service excellence, assessing the product quality is significantly important for brands and retailers. (Keeney 1999)

Kalakota and Whinston (1996) stated that it is very necessary for merchants to evaluate goods and services independently in order to convince consumers on the website. Zhu & Kraemer (2002) defined product customization as “the users’ ability to customize products according to personal preferences”. Today some e-commerce platforms have achieved significant success by presenting a personalized set of products to their customers. Product customization helps brands boost sales on their own websites or gain share on a retailer’s site. (See Spaulding & Perry 2013)

Moreover, as one of the great advantages of online shopping, customization makes it possible for customer to be unique in terms of choices, tastes and acquisitions. (Schaupp et al. 2005)

3.2.3 Website Factors

Website characteristics refer to “the qualities of a website that ensure the functionality of the site”, comprising of security, privacy and usability. (Schaupp et al. 2005)

Sometimes a consumer can be overwhelmed by the amount of information
available on the Internet, thus the possibility of quickly finding exactly what he or she wants on the website is very important. (Xue, Harker & Heim 2000) In order to make sure the possible convenience and merchandising effect, it is very important to improve the website itself, which plays a significant role in influencing customers’ satisfaction with their online shopping experiences. (Ranjbarian et al. 2012)

Manes (1997) thought that good website design refers to good organization and easy search. Moreover, Pastrick (1997) stated that when the retailing sites were uncluttered, fast and easy-to-navigate, shopping online was thought to be pleasurable and satisfying to consumers. (Ranjbarian et al. 2012)

It seems that there are still so many consumers who lack of trust for the website and are reluctant to release payment card information to online merchants. Meanwhile, merchants and financial institutions are concerned about the online chargeback costs and worry that hackers will compromise their systems.

As the major barrier to EC, The National Computer Security Association (NCSA) has identified four cornerstones of secure EC, which include:

1. **Authentication**: a method to verify the buyer’s identity before payment is authorized.
2. **Encryption**: a process of making messages indecipherable except by those who have an authorized decryption key.
3. **Integrity**: ensuring that information will not be accidentally or maliciously altered or destroyed during transmission.
4. **Nonrepudiation**: protection against customers’ denial of orders placed and against merchants’ denial of payments made.

(Turban et al. 2000, 278)

In order to increase customers’ trust for online payment, many merchants try to offer multiple payment options, such as telephone ordering and account with ID’s
and passwords (Schaupp et al. 2005). In addition, most customers do not have enough patience or free time and some cannot perform the technical installation process. Therefore, merchants have to open alternative user-familiar payment methods. (Straub 2000)

In the e-commerce field, privacy is defined as “the willingness to share information over the Internet that allows for the conclusion of purchases”. The B2C e-commerce platform gathers visitors’ information through explicit modes and implicit means, which provide the necessary data for a company’s decision making related to marketing, advertising, and products. (See Patterson, Johnson & Spreng 1997)

According to a consumer privacy survey in U.S. in the year 1999, most of the respondents thought they had lost all control of personal information collected by companies. As a result, customers gradually have strong sense of protecting personal information online, though many websites display privacy policies, for they still have doubts about the trust ability of that. Therefore, users’ willingness to engage in online exchanges of money and personal sensitive information is influenced due to the lack of trust for privacy. (Liu & Arnett 2000) However, it is vitally essential for the e-marketer to guarantee the privacy of websites in order to build up the long-term customer relationship (Schaupp et al. 2005).

Szymanski and Hise (2000) illustrated that navigation, product information and site design was crucial for the satisfactory of e-commerce transaction. With a usable website, customers are able to have interactivity with the merchants, which has crucial influence on their purchasing decisions.

Moreover, according to the Fortune (2000), more than 95% of online potential customers leave a website without buying anything because they cannot find what they want. Therefore, a popular website is expected to be equipped with an efficient and user-friendly search system, which contribute to the increase of sales, profits, and overall customer satisfaction.
Palmer (2002) highlighted the importance of website design, and he stated that a usable website should generate a desirable perception of its use and an intention to use the site. Doll and Torkzadeh (1988) stated the ease of use is one of the most important assessments for the usability of website. For the internet consumers, if the websites are easy to use and effectively helpful for them in accomplishing their tasks are their main assessments for websites. (Zeithaml 2000)

In addition, the response time is also an important indicator for the assessment of the website usability. Without consistent and fast download speed, consumers who are looking through the products’ pictures may abandon the transaction finally. (Cheung et al. 2005)

3.2.4 Customer Service

Turban et al. (2000) defined customer service as “a series of activities designed to enhance the level of customer satisfaction”. During the five phases of purchasing decision-making process, customer service provides help for customers to resolve any problem that they meet. (Liu et al. 2000)

Customer service is critical in the ongoing relationship between retailers and their customers. With the development of social media, e-commerce companies need to understand and embrace these new social customers. (Salesforce.com 2014)

There are many forms of customer service in e-commerce platform, which includes answering customer inquiries, providing search and comparison capabilities, providing technical and other information, letting customers track account or order status information, and allowing customers to customize and order online. (Turban et al. 2000)

The ability to get free information on demand is of great importance for online consumers, which also plays a crucial role in the information search phase during the purchasing process. So it is necessary for the e-commerce companies to build a website with innovative links and keywords, which provide further information
for customers and make it possible for them to chat with the online employees. (Straub 2000)

Sometimes when the customer searches for information online, they may find thousands of stores and products online, at that time, it is essential for them to use efficient search engines to compare prices. Moreover, the follow-up service also takes a partnering role in developing market research that will enable the business to capitalize on the customers’ preferences and needs. Logging in the web site, customers can view their account balance and check their merchandise shipping status at any time, and similarly, they can also find the status of stock portfolio, loan application and so on. Moreover, the ability to place an order at any time and download manuals and problem solutions over the Internet is of great importance for the customer service. (Sauer 2000)

In order to enhance customer service, e-commerce platforms innovate many web-related tools, such as personalized web pages, FAQs, a chat room, e-mail and automated response, and help desks and call centers.

In order to provide convenience for customers to record purchases and preference information, many companies are creating websites that make it possible for customers to create their own individual webpage. Frequently asked questions (FAQs) are the simplest and least expensive tool to deal with repetitive customer questions. As an important tool of customer service, a chat room can attract new customers and increase customers’ loyalty by one-to-one connections between the company and their customers. (Patterson et al. 1997)

Though there are a wide variety of tools for customer service, the most popular one is e-mail, which is inexpensive and fast. However, sometimes e-commerce companies may receive tens of thousands of e-mails a week or even a day, which is too expensive and time-consuming for them to answer manually. On the other hand, from the perspective of customers, they always want to get replies as quickly as possible from the merchants when they have a buying desire, thus
leading to an automatically system. (Straub 2000)

A help desk is one of the most important tools of customer service, where customers can ask for help by telephone, fax, or e-mail. A call center may need to deal with deploying technologies, and in addition, it is very necessary to have trained customer service representatives who can deal with foreign languages in some cases and manage such a function in an effective way. (Turban et al. 2000, 92)

As a medium of instant gratification for both consumers and businesses, Internet’s delay may make them lose potential customers. With proactive alerts, customers can get effective information and give more trust for the company. In turn, a company can maintain personal touch with online customers and build a long-term customer relationship in this way. (Tan 2013)

3.2.5 Delivery Factors

During the customers’ shopping process, there are two factors that may have influence on their feelings and perceptions, which includes shopping convenience and delivery support. According to Bellman, Steven, Lohse, Gerald and Johnson (1999), online consumers change their shopping style in order to save time. It indicates that the amount of time it takes for the product to be received is vitally important for customers. (See Schaupp et al. 2005)

Balasubramanian (1997) stated that E-retailing was promoted widely as a convenient avenue for shopping. It is much easier for customers to locate their familiar merchants, to find their ideal products, and procure offerings when they shop online compared with physical stores. Moreover, they can browse for items at an online store instead of leaving home to travel for a particular product. (Ranjbarian 2012)

Torkzadeh & Dhillon (2002) identified the convenience of delivery as a “fundamental objective” related to online shopping. With delivery services, it is
much easier and less costly to keep the existing customers than to look for new ones. (Tan 2013)

In an e-commerce environment, there are two types of users who may need e-commerce delivery services: E-shoppers and E-retailers. As the final customer of delivery, E-shoppers buy delivery service from the e-retailer without a contract with the delivery operator. For the E-retailers, they are the intermediate consumers of delivery who buy delivery services from delivery operators and logistic intermediaries. (Okholm, Thelle, Möller, Basalisco, & Rølmer 2013)

For the E-shoppers, there are four different aspects related to delivery services that they consider important when they shop online. They are time and speed of delivery, value added features, delivery price and return options.

According to Schaupp et al. (2005), delivery time refers to the total time between order placement and delivery, including dispatch, shipping, and delivery. According to the survey, it reveals that most e-shoppers find delivery within two to four days more important than both express and next day delivery (Okholm et al. 2013).

There are two most important value-adding features, which include track and electronic notifications. It is very important for customers to receive information about the progress of their orders and real time information about their delivery, which also affect the customers’ satisfaction with e-commerce online services.

Except for the delivery time, pricing is considered as the most important delivery feature for e-shoppers. For some customers, to a large extent, delivery prices determine their decisions to purchase from an e-retailer at the first place. However, online consumers may have different price preferences, some of them may only care about the low delivery price, others may be preferred to pay more for delivery in exchange for extra services, faster or more convenient delivery. (See Okholm et al. 2013)
As an important part of online purchasing process, returns means the consumers can return the goods they bought online. E-retailers can increase their online customers’ confidence in online purchasing by ensuring convenient return options. (See Okholm et al. 2013) For the merchants, if they know a customer bought a product from their e-commerce platform, they should receive the products without asking for a receipt. (Tan 2013)

3.3 Summary of Theoretical Findings

The objective of this part is to make a short summary of the theoretical findings, which contribute to building a clearer basis for the implementation of the research in empirical part of the thesis.

At the beginning of this chapter, online customer behaviors were analyzed then presented in the EC Internet consumer behavior model. This model illustrated that online customers’ buying decisions are influenced by the customer's personal characteristics, environment, logistics, technical factors, customer service as well as other factors. Moreover, when the consumers start to purchase online, there are five stages during they decision-making process, including need recognition and awareness, information search, evaluation of alternatives, purchase and post-purchase evaluation.

At the third stage of the buyer’s purchasing process, customers’ buying decision-making can be influenced by personal characteristics, environmental factors and other factors based on the online customer behavior model. Among these factors influencing customers’ decision making, the personal characteristics of gender, age, occupation, income level and geographic segmentation will be chosen for the empirical study.

Then, in the second part of this chapter, the Internet consumer satisfaction model was presented at first, and then a variety of references are used to explain the related factors involved in this model, which will be also the basis of the questionnaire design in the empirical study.
The internet consumer satisfaction model is based on four main elements involved in the online purchasing services, including product, website, customer service and delivery. The four main elements were illustrated respectively, from different related key factors. All these factors have influence on the buyer’s purchasing decisions and impact their satisfaction of their online purchasing experiences. More importantly, all these factors will be included in the survey, which will be given to the respondents for the empirical study.

Overall, Chapter 3 illustrated three core theories of online consumer behavior model, buyer’s purchasing process and internet consumer satisfaction model are tightly closed to the empirical study, which will be the basis of questionnaire design in research study.

Online consumer behavior model presented how customers’ buying decisions are influenced by personal characteristics, environmental factors and other marketing factors. This online consumer behavior model is also tightly close to the buyer’s purchasing process. At different stage of online purchasing process, buyers’ decision making can be influenced by different pressures. Meanwhile, at every stage of the online purchasing process, there always exist some relative factors that have influence on customer satisfaction. These three models in Chapter 3 relate to each other closely, providing a solid theoretical base for the empirical study of this research.
4 RESEARCH METHODOLOGY

Aaker, Kumar and Day (2006) state any research organization should try to obtain information on customer needs and gather marketing intelligence to help satisfy these needs efficiently. Through marketing research, every decision poses unique needs for information gathered, and thus relevant strategies can be developed.

According to Sabel (2012), there are five steps to conducting a research plan:
- Defining the research problem
- Making the research plan
- Collecting data
- Analyzing data
- Making a summary and a report

The research problem was already been defined in chapter 1, so the research methods along with data will be presented in the following part. In addition, the distinction between qualitative and quantitative research will be discussed as well as the sample selection. At the end of this chapter, the validity and reliability of the research will also be described.

4.1 Research Methods

Rajasekar, Philominathan and Chinnathambi (2013) describe research methods as “various procedures, schemes and algorithms used in research”. All the methods used by a research are essentially planned and scientific, which help to collect data and sample.

There are two major research methods, which are qualitative and quantitative methods. Burns and Bush (2000) stated that the researchers choose to use which kinds of research methods are based on the desired results that the study sets out to achieve. In addition, both the quantitative research method and qualitative research method will be discussed and compared on their differences in this study.
4.1.1 Qualitative Research

Qualitative research can be defined as “An unstructured methodology based on small samples, intended to provide insight and understanding.” (Sabel 2012) Usually, these methods are less structured and more intensive than standardized questionnaire-based interviews. As a type of flexible research method, it allows the respondents to reflect upon and express their views, so the collected data have more depth and greater richness of context.

Marshall and Rossman (1999) state that qualitative research increase our understanding of why things are the way and why people act the way they do.

In a qualitative research, the number of respondents who represent a specific target group is small, thus this research method is not suitable for carefully structured and large-scale field studies. (Aaker et al. 2006, 189)

According to Duffy (1987), a qualitative approach is used as a vehicle for studying the empirical world from the perspective of the subject, not the researcher.

4.1.2 Quantitative Research

Quantitative research can be defined as “ A research methodology that seeks to quantify the data and, typically, applies some form of statistical analysis” (Malhotra 2004). In a quantitative research, a structured questionnaire often given to a large sample of a population and designed to elicit specific information from respondents.

Quantitative research is described by the terms ‘empiricism’ (Leach 1990) and ‘positivism’ (Duffy 1985). Compared with qualitative research, this research approach is a more objective and formal systematic process in which numerical data findings.
Cormack (1991) state that quantitative research tests theory based on existing knowledge, through developing hypothesized relationships and proposed outcomes for study. Quantitative research is the most common method used to collect primary data due to its large number of respondents in marketing research. (Sable 2012)

The are many difference between qualitative research and quantitative research in terms of the aim, researchers, data collection etc., which is illustrated in the following Table 1:

**Table 1.** Features of qualitative & quantitative research (Miles & Huberman 1994, 40)

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim is a complete, detailed description.</td>
<td>The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.</td>
</tr>
<tr>
<td>Researcher may only know roughly in advance what he/she is looking for.</td>
<td>Researcher knows clearly in advance what he/she is looking for.</td>
</tr>
<tr>
<td>Researcher is the data-gathering instrument.</td>
<td>Researcher uses tools, such as questionnaires or equipment to collect numerical data.</td>
</tr>
<tr>
<td>Data is in the form of words, picture or objects.</td>
<td>Data is in the form of numbers and statistics.</td>
</tr>
<tr>
<td>Subjective: e.g. uses participant observation, in-depth interviews etc.</td>
<td>Objective: e.g. uses surveys, questionnaires etc.</td>
</tr>
<tr>
<td>Qualitative data is more ‘rich’, time consuming, and less able to be generalized.</td>
<td>Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.</td>
</tr>
</tbody>
</table>

As shown in Table 1, the quantitative research and qualitative research have many differences in terms of the aim, the role of researcher, the form of data collection...
etc. In general, compared with qualitative research, quantitative research is more objective, whose data analysis is usually based on a large sample. On the other hand, qualitative research is more subjective whose results are usually based on a small sample and easily influenced by the interviewers.

In this research for JD.com, primary data needs to be collected from a large number of online consumers, thus the quantitative research is determined to be the main method for the study.

4.2 Data Collection

There are two kinds of data, primary data and secondary, depending on where the source is from. Kumar (2000) defined primary data as “data that was collected or observe from firsthand experience”. Secondary data is the data collected previously, which can be from company record, annual reports, government publication, trade journal or other sources.

The quantitative research data collection methods mainly rely on structured data collection instruments and random sampling, which is easier to summarize, compare and generalize the results.

There are five strategies for the quantitative data collection, including experiments, observing and recording events, obtaining relevant data from management information systems, and administering surveys with questions (such as interviews and questionnaires). (Uwec 2012)

In this research, the questionnaire will be chosen as the main data collection method. In a questionnaire, the questions can be in both printed and electronic forms. Before designing a questionnaire, the researcher should be absolutely clear on what is the aim to learn and what data needs to be obtained in this research.

Based on the research problems and theoretical study, the questionnaire in this research is divided into three sectors: basic information, opinions on online
purchasing services and customer satisfaction of JD.com.

4.3 Reliability and Validity

Joppe (2000) defined reliability as “the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.”

Reliability refers to the stability or consistency of the results. Additionally, if the sample in a research is larger, the reliability tends to be better. (Cooper & Schindler 1998)

Validity is defined as “the extent to which the instrument measures what it purports to measure. It refers to the degree that a study accurately reflects or evaluates the specific research questions that the researcher is attempting to measure” (Joppe 2002). Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others.

The reliability and validity can be demonstrated from three aspects in this research. At first, a wide variety of sources used in this study are closely relevant and academic, which supported the implementation of empirical study. From this point, the academic references in theoretical part build a reliable and valid base, which contribute to later empirical analysis of this research.

Then, ten respondents were chosen to participate in a pilot test in order to guarantee the validity and reliability of this research. These ten respondents are between different ages and from different areas, representative a relevant target sample in this research. The pilot test was conducted in order to detect the weakness of questionnaire design and implementation. In this way, some valuable advice can be obtained to improve the final questionnaire design.

At last, from the perspective of questionnaire design, all the 18 questions in the
questionnaire are set to serve the research problem of this thesis, which aims at investigating customer satisfaction towards online purchasing services at JD.com. In addition, there are no sensitive or private questions, from this point, the data collected in this questionnaire are considered reliable and trustful.

During two weeks, almost 350 links of the questionnaires were sent over the Internet, and then 186 responses of the questionnaire were received, of which 182 were considered to be valid and reliable. Four questionnaires were considered invalid due to the incredibly short time or the high repeated answers rate. As a result, 182 out of all 186 were considered reliable and valid, which accounts for 97.8% of the total respondents.
5 EMPIRICAL FINDINGS

This questionnaire can be divided into three main sectors: basic information, opinions on online purchasing, and customer satisfaction with JD.com. Therefore, the empirical findings will also be presented grouped in the relevant three sectors: basic information, online purchasing finding and customer satisfaction of JD.com. In addition, charts and tables will be used to illustrate all the quantitative results in this chapter.

5.1 Demographic Information

In the questionnaire the basic information includes gender, age, occupation, monthly income and geographic segmentation. All of them are examined with single-choice questions and shown using pie charts or bar charts.

Figure 15. Respondents’ gender pie chart

Figure 15 demonstrates the proportion of the gender among the total of 182 valid respondents. As shown, the number of male respondents is 84(46%), while the number of female respondents is 98(54%).
In Figure 16, the pie chart demonstrates the information regarding the age distribution of the respondents. Among the total of 182 respondents, young people, whose ages range from 18 to 28, account for 45% of the total respondents. Then followed by the 29-39 year-olds (17%) and 40-50 year-olds (14%). In addition, there are 20 respondents (11%) under 18 years old and 23 respondents (13%) over 50 years old answering to this questionnaire.

In the questionnaire the occupations of the respondents are mainly divided into five categories, which include student, manager, administrator, engineer and others. As illustrated in Figure 17, 50% of the total respondents are students, with a number of 92. There are 33 managers and 32 administrators among the respondents who both account for 18%. In addition, there are only 13 engineers
answering to this survey. The 12 respondents who choose other occupation types may be interns or unemployed.

Figure 18. Respondents’ income level

This Question 4 on income was aimed at investigating the general monthly income level of the respondents. As shown in Figure 18, the income level is classified into six categories: less than 3000 RMB per month, 3000-6000 RMB per month, 6001-9000 RMB per month, 9001-12000 RMB per month, 12001-15000 RMB per month and above 15000 RMB.

The data shows that respondents whose monthly income under 3000 RMB is the largest group (52%), followed by respondents with monthly income of 3000-6000 RMB (16%). The number of respondents who earn over 15000 RMB per month is sixteen, in percentages 9%, which is 5% larger than the respondents whose monthly income level is between 12,001 and 15,000. The result can be evaluated as valid and reliable because they match with the results of age group and occupation.
The targeted group of this research is internet consumers who know about JD.com, so the questionnaires are mainly sent to respondents who have lived or live in China. Therefore, the geographical areas in this questionnaire are divided into ten areas in China: Xinjiang Province, Mongolia, Shanxi Province, Shanghai, Hunan Province, Jiangsu Province, Zhejiang Province, Beijing, Hubei Province and other areas.

Figure 19 clearly shows that over half of the total respondents are from Hubei province in China, which means the results in this research are especially suitable for Hubei area. It is necessary for the marketer to segment the market clearly due to the distinct preferences in different areas in China, which contributes companies to target their major market clearly and make different marketing strategies vary between the areas.

5.2 Online Purchasing

The objective of studying online purchasing is to obtain basic knowledge about internet consumers’ online purchasing situation, and more importantly, their opinions on Chinese e-commerce platforms.
From Question 6 to Question 10 in the questionnaire aim to creating a basic knowledge about respondents’ online shopping frequency, reasons, main products preferences, buying-decision influencing factors, and overall online customer satisfaction for e-commerce platforms in China. All results in this part are presented using charts, and additionally, tables illustrate the further analysis of the results.

5.2.1 Frequency of Online Shopping

The objective of Question 6 was to acquire a general knowledge about how often the respondents shop online per month in China. As shown in Figure 20, over half of the total respondents (51%) usually shop online one to three times per month. Meanwhile, 23% of the total respondents shop online over 11 times per month. The analysis of the respondents’ online purchasing frequency will be presented (see Table 2) along with the age and gender factors.

**Figure 20.** Respondents’ frequency of online shopping

Additionally, there are six respondents who have never shopping online, so they are asked to go to the end of questionnaire and finish it, which means the total number of respondents for question 7 is 176 instead of 182. In addition, the specific information of these 6 respondents who have never purchased online will
be analyzed in the Table 3 below.

5.2.2 Frequency Analysis of Gender, Age and Shopping

Table 2 analyzes the relationships between gender, age and online shopping frequency of the respondents. As shown in the table, the male and female respondents between 18-39 are the main online consumers. Among the total of 84 male respondents, there are only four male respondents who have no online purchasing experiences, with a percentage of 2.2% of the total respondents. On the other hand, among the 98 female respondents, only two female respondents have no earlier online shopping experiences, with a proportion of 1% of the total respondents participating in this survey.

Table 2. Respondents’ online purchasing experiences analysis

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>No experiences of online shopping</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1-3 times</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>4-7 times</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>8-11 times</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>More than 11 times</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
In the age group of 18-28 years, most of male respondents tend to purchase online one to three times per month, while almost half of the female respondents also usually shop online one to three times per month. However, considering the number of respondents who purchase online over eight times per month, there are female respondents obviously more than male respondents.

In addition, most of the respondents who purchase online over 11 times are between 18-39 years old. On the other hand, most of the respondents who purchase online less than 8 times per month are over 40 years old.

### 5.2.3 Respondents Having no Online Purchasing Experience

Table 3 illustrates the specific information about six respondents who have no earlier online purchasing experiences. The data in this table, obviously, it shows that most of the six respondents are males, and in the meantime, most of them are over 40 years old.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
<th>Geographic segmentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18-28</td>
<td>Engineer</td>
<td>Xinjiang</td>
</tr>
<tr>
<td>Male</td>
<td>40-50</td>
<td>Engineer</td>
<td>Beijing</td>
</tr>
<tr>
<td>Male</td>
<td>Over 50</td>
<td>Administrator</td>
<td>Hubei</td>
</tr>
<tr>
<td>Male</td>
<td>Over 50</td>
<td>Administrator</td>
<td>Shanghai</td>
</tr>
<tr>
<td>Female</td>
<td>40-50</td>
<td>Manager</td>
<td>Shanxi</td>
</tr>
<tr>
<td>Female</td>
<td>Over 50</td>
<td>Administrator</td>
<td>Hubei</td>
</tr>
</tbody>
</table>

It is necessary for the e-commerce marketers to collect information about the respondents who have no online purchasing experiences, which can help them to make specific strategies for these potential customers in order to expand their market. From Table 3, it is important for the marketer to make some promotions aiming at males, especially those over 40 years of age.
5.2.4 Reasons of Purchasing Online

Question 7 aimed at gaining a thorough understanding of the reasons why the respondents choose to purchase online instead of in the physical stores. This can help the e-commerce marketers to know about their customers better and develop their advantages to expand their markets (see Figure 21).

![Figure 21. Respondents’ reasons for online shopping](image)

Figure 21 shows clearly enough that cheaper price of online products is the most important reason why most respondents (83%) purchase online. Wider range of products is the second important reason for purchasing online, chosen by 68% of the respondents. 65% of the total respondents choose to shop online in order to save time and distances. However, only 19% of the total respondents think online products have better quality compared with those of physical stores.

5.2.5 Respondents’ Product Preferences

The objective of question 8 was to obtain information about what kinds of products that respondents tend to purchase online. The products are mainly classified into nine categories, which include clothes, daily products, books and videos, electronic products, food cosmetics, outdoor equipment, furniture and others (see Figure 22).
As illustrated in Figure 22, clothes are the first choice for internet consumers to purchase online, followed by daily products. There are 54% of total respondents who have ever purchased books and videos online. Only 5% of the total respondents purchase furniture online, which is the least frequent choice for the respondents of this questionnaire.

### 5.2.6 Factors Influencing Online Buying Decisions

Question 9 aimed at finding out the respondents’ opinions on the factors that may influence their purchasing decisions during their online purchasing process. They had five options to choose for each factor, from “Very weak” to “Weak”, “Average”, “Strong “or “Very strong”.

Based on the online customer behavior model in theoretical part of this thesis, there were seven factors chosen to investigate their influence on buyer’s purchasing decisions, including reputation of the company, price, quality, customer service, payment services, delivery services and after-sale services, as shown in Table 4 below:

**Figure 22. Respondents’ product preferences for online shopping**
Table 4. Factors influencing respondents’ buying decisions

<table>
<thead>
<tr>
<th>Factors influence buying merchandise</th>
<th>Very weak</th>
<th>Weak</th>
<th>Average</th>
<th>Strong</th>
<th>Very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation of the company</td>
<td>1.7%</td>
<td>2.2%</td>
<td>1.7%</td>
<td>43.3%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Price</td>
<td>1.4%</td>
<td>2.2%</td>
<td>18.1%</td>
<td>14.5%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Quality</td>
<td>1.7%</td>
<td>1.7%</td>
<td>13.7%</td>
<td>14.5%</td>
<td>68.4%</td>
</tr>
<tr>
<td>Customer service</td>
<td>1.7%</td>
<td>2.2%</td>
<td>7.2%</td>
<td>46.4%</td>
<td>42.5%</td>
</tr>
<tr>
<td>Payment services</td>
<td>1.7%</td>
<td>6.5%</td>
<td>2.9%</td>
<td>49.35%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Delivery services</td>
<td>1.7%</td>
<td>2.2%</td>
<td>4.3%</td>
<td>42.1%</td>
<td>49.7%</td>
</tr>
<tr>
<td>After-sale services</td>
<td>1.7%</td>
<td>2.2%</td>
<td>10.1%</td>
<td>28.9%</td>
<td>57.1%</td>
</tr>
</tbody>
</table>

Among the seven factors, quality arises as the most important factor in the respondents’ purchasing decisions, followed by the price, with the percentage of 68.4% and 63.8% respectively among the respondents who choose “very strong”. For the factors after-sale services, delivery services, and reputation of the company, most respondents choose “very strong” for their purchasing decision-making. Most respondents think the customer services and payment services are important for their decision-making, but not as “very strong” factor for them.

5.2.7 Satisfaction Level for Other Chinese Online Purchasing Platforms

The objective of Question 10 was to gain a general knowledge of respondents’ opinions on their purchasing experiences on Chinese online shopping platforms. 176 respondents were asked to choose between “completely unsatisfied”, “unsatisfied”, “neutral”, “satisfied”, and “completely satisfied”(see Figure 23).
Figure 23. Respondents’ overall satisfaction for other Chinese online purchasing platforms

Clearly enough, as shown in Figure 23, 36% of the respondents choose “satisfied”, then followed by the number of respondents who gave “neutral”, with a percentage of 23%. Among the 176 respondents, 32 respondents feel “completely satisfied” with their online purchasing experiences.

On the other hand, respondents who hold the view of “unsatisfied” or “completely unsatisfied” account for 12% and 11% respectively. Overall, most of the respondents have a positive view of the online shopping experiences in other Chinese e-commerce platforms.

5.3 Customer Satisfaction of JD.com

This section is mainly aimed at investigating customer satisfaction of the case company JD.com. Questions 11 to 18 are designed based on the internet customer satisfaction model presented in the theoretical study, investigating internet customers’ opinions on their purchasing experiences in terms of products, website design, customer services and delivery services related factors. In this section, the results are presented in the following figures and tables.

5.3.1 Previous Online Experiences at JD.com

As the first question of this part, respondents were asked if they had previous
online purchasing experiences at JD.com and the result are shown in the Figure 24 below.

![Figure 24. Respondents purchasing experience at JD.com](image)

With the expansion of JD.com in recent years, among the 176 respondents, 97% of respondents had previous experience of purchasing at JD.com. On the other hand, the rest 3% of the respondents had never purchased products or services at JD.com, thus they were unable to finish the following questions concerning the satisfaction for purchasing services. Therefore, the total number of respondents decreased to 170 from Question 12 to Question 17.

Table 5 shows the information of the six respondents who had never purchased items at JD.com. For these respondents, there are some explaining features: most of them are over 40 years old and are working currently. In addition, the number of male respondents who have no purchasing experiences at JD.com is twice the number of female respondents.
Table 5. The 6 respondents who have never purchased in JD.com

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Occupation</th>
<th>Geographic segmentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18-28</td>
<td>Student</td>
<td>Xinjiang</td>
</tr>
<tr>
<td>Male</td>
<td>40-50</td>
<td>Engineer</td>
<td>Beijing</td>
</tr>
<tr>
<td>Male</td>
<td>40-50</td>
<td>Engineer</td>
<td>Hubei</td>
</tr>
<tr>
<td>Male</td>
<td>Over 50</td>
<td>Administrator</td>
<td>Hubei</td>
</tr>
<tr>
<td>Female</td>
<td>Over 50</td>
<td>Manager</td>
<td>Shanxi</td>
</tr>
<tr>
<td>Female</td>
<td>Over 50</td>
<td>Administrator</td>
<td>Shanghai</td>
</tr>
</tbody>
</table>

Though the young customers are the major consumer group for online shopping, it is still important for the marketer to reach customers above 40 years old. Usually, most of consumers over 40 years old are working with a higher-level income jobs, which means they have a stronger potential purchasing power than the young consumers.

Then, from the Question 12 to Question 15, which is based on the core theoretical model of Internet consumer satisfaction model in chapter 3, involved in four categories including product, website, customer services and delivery.

These four questions are aimed to investigate customers’ opinions towards product, website, customer services and delivery services related factors. In addition, each question is set five choices for the answer, including “completely unsatisfied”, “unsatisfied”, “neutral”, “satisfied”, and “completely satisfied”.

5.3.2 Opinions Towards Product-related Factors at JD.com

Question 12 is aimed to acquire customers’ opinions on their online shopping experiences at JD.com in terms of product related factors, such as price, quality, variety, supply and customizing. Table 6 shows that among the 170 respondents almost half of them think the price level of the products is “neutral” and one third of the respondents think it is satisfied. On the other hand, there is nobody choosing “completely unsatisfied” for the prices at JD.com.
### Table 6. Respondents’ opinions towards product-related factors

<table>
<thead>
<tr>
<th>Opinions towards products related factors</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>0%</td>
<td>0%</td>
<td>51%</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Quality</td>
<td>5%</td>
<td>1%</td>
<td>3%</td>
<td>71%</td>
<td>20%</td>
</tr>
<tr>
<td>Variety</td>
<td>1%</td>
<td>2%</td>
<td>21%</td>
<td>61%</td>
<td>15%</td>
</tr>
<tr>
<td>Supply</td>
<td>1%</td>
<td>1%</td>
<td>22%</td>
<td>62%</td>
<td>14%</td>
</tr>
<tr>
<td>Customized</td>
<td>1%</td>
<td>2%</td>
<td>21%</td>
<td>64%</td>
<td>12%</td>
</tr>
</tbody>
</table>

As for the quality of products, which is another vitally important factor influencing customers’ decision-making, most of the respondents are satisfied with that. However, there are 5% of the respondents who feel “completely unsatisfied” with quality of the products.

For product variety, product supply and product customization, the respondents hold a very similar opinion towards these three factors. Most of the respondents chose “satisfied”, some of them thought “neutral” and “satisfied”, and only a few of them chose “unsatisfied” or “completely unsatisfied”.

#### 5.3.3 Opinions on Website Design Related Factors at JD.com

Table 7 illustrates data about the respondents’ opinions on website related factors in terms of website design, payment methods, privacy and security. 67% of the respondents satisfied with JD.com’s website design, followed by the respondents who hold a “neutral” view towards the website design. On the other hand, among the 170 respondents, nobody chose “unsatisfied” or “completely unsatisfied” for the website design of JD.com. Similarly to the opinions towards website design, 59% of respondents feel “satisfied” with payment methods of JD.com, and 27% of
them kept neutral for this.

**Table 7. Respondents’ opinions towards website-related factors**

<table>
<thead>
<tr>
<th>Opinions towards website design related factors</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website design</td>
<td>0%</td>
<td>0%</td>
<td>21%</td>
<td>67%</td>
<td>11%</td>
</tr>
<tr>
<td>Payment methods</td>
<td>0%</td>
<td>0%</td>
<td>27%</td>
<td>59%</td>
<td>14%</td>
</tr>
<tr>
<td>Privacy</td>
<td>3%</td>
<td>1%</td>
<td>48%</td>
<td>35%</td>
<td>13%</td>
</tr>
<tr>
<td>Security</td>
<td>4%</td>
<td>0%</td>
<td>29%</td>
<td>51%</td>
<td>16%</td>
</tr>
</tbody>
</table>

For the privacy and security, a total at 4% of the respondents had negative view about these two factors. Differently, most respondents had a “neutral” view for the privacy, but feel of “satisfied” with security. As for the respondents who feel “completely satisfied” with privacy and security, with a percentage of 13% and 16% respectively.

### 5.3.4 Opinions Towards Customer Service

Table 8 explains the respondents’ opinions on customer services at JD.com. Almost half of the respondents (51%) hold the “neutral” view for the answering customer inquiries services that they have experienced in JD.com. In addition, one third of the respondents (33%) feel “satisfied”. However, there are still a small number of respondents, 3% of the total respondents who are “unsatisfied”.
Table 8. Respondents’ opinions towards customer services

<table>
<thead>
<tr>
<th>Opinions towards customer services related factors</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering customer inquiries</td>
<td>0%</td>
<td>3%</td>
<td>51%</td>
<td>33%</td>
<td>13%</td>
</tr>
<tr>
<td>Providing search and comparison capabilities</td>
<td>0%</td>
<td>0%</td>
<td>43%</td>
<td>43%</td>
<td>14%</td>
</tr>
<tr>
<td>Letting customers track account or order status</td>
<td>0%</td>
<td>3%</td>
<td>21%</td>
<td>52%</td>
<td>24%</td>
</tr>
<tr>
<td>Allow customer to customize products and order online</td>
<td>3%</td>
<td>2%</td>
<td>35%</td>
<td>49%</td>
<td>11%</td>
</tr>
</tbody>
</table>

When it comes to customer services of providing search and comparison capabilities, the respondents who choose “neutral” account for 43% of the total respondents, which is the same percentage as “satisfied”.

Similarly, almost half of the respondents hold the same opinion of “satisfied” on letting the customer track account or order status and allowing the customer to customize products and order online. Differently, the number of respondents who feel “completely satisfied” for letting customer track account or order status is larger than respondents with “neutral” opinions. However, as for allowing
customer to customize products and order online, the situation is completely in the opposite in terms of the opinions “neutral” and “completely satisfied”.

5.3.5 Opinions Towards Delivery-related Factors

Next question aimed to collect information about customers’ opinions on delivery services related factors, such as packaging, delivery price, delivering time and after-sale services.

Table 9. Respondents’ opinions towards delivery-related factors

<table>
<thead>
<tr>
<th>Opinions towards delivery related factors</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>0%</td>
<td>3%</td>
<td>35%</td>
<td>54%</td>
<td>8%</td>
</tr>
<tr>
<td>Delivery price</td>
<td>2%</td>
<td>5%</td>
<td>36%</td>
<td>52%</td>
<td>5%</td>
</tr>
<tr>
<td>Delivery time</td>
<td>0%</td>
<td>0%</td>
<td>24%</td>
<td>52%</td>
<td>24%</td>
</tr>
<tr>
<td>After-sale service</td>
<td>0%</td>
<td>3%</td>
<td>35%</td>
<td>48%</td>
<td>14%</td>
</tr>
</tbody>
</table>

As shown in Table 9, almost half of the respondents feel “satisfied” with all four factors related to delivery services, with a percentage of 54% for packaging, 52% for delivery price and delivery time, and 48% for after-sales service. In addition, the percentage of respondents who hold a negative view for packaging and after-sale service is the same, with a proportion of 4% in total. For the delivery time of JD.com, no respondents feel “unsatisfied” or “completely unsatisfied”.

5.3.6 Customer Satisfaction for Online Purchasing Experiences at JD.com

This Question 16 is aimed at gaining a general knowledge about online customers’
opinions towards their purchasing experiences at JD.com. The respondents were asked to choose one from “completely unsatisfied”, “unsatisfied”, “neutral”, “satisfied”, and “completely satisfied”.

![Overall satisfaction](image)

**Figure 25.** Respondents overall satisfaction for online purchasing experiences at JD.com

Figure 25 shows that almost half of the respondents (49%) have chosen “satisfied” as their general opinion on their online purchasing experiences at JD.com, followed by the respondents who choose “neutral”, with a percentage of 24%, which is 5% more than that of “completely satisfied”.

On the other hand, the respondents who hold the view “unsatisfied” or “completely unsatisfied” account for 3% and 5% respectively of the total rest respondents in this questionnaire. In general, most of the respondents hold a positive view towards their online purchasing experiences in JD.com.

### 5.3.7 Comparison of Satisfaction between Platforms

Table 10 gives a clear overview of the respondents’ online purchasing satisfaction between JD.com and other Chinese e-commerce platforms. By presenting the comparison of customer satisfaction between JD.com and other Chinese e-commerce platforms, the case company can have a better understanding of its customer satisfaction level among the e-commerce industry.
Table 10. The comparison of respondents’ satisfaction between JD.com and other Chinese e-commerce platforms

<table>
<thead>
<tr>
<th>Overall satisfaction</th>
<th>JD.com</th>
<th>Other Chinese e-commerce platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely unsatisfied</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>Unsatisfied</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>Neutral</td>
<td>24%</td>
<td>23%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>49%</td>
<td>36%</td>
</tr>
<tr>
<td>Completely satisfied</td>
<td>19%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Customers’ satisfaction with JD.com is much better than that of whole level of Chinese e-commerce platforms. As shown in Table 10, the percentage of respondents who choose “satisfied” and “completely satisfied” for JD.com is 49% and 19% respectively, more than that of Chinese e-commerce platforms whose is 36% and 18% in several.

On the other hand, the respondents who feel “unsatisfied” or “completely unsatisfied” with JD.com is 3% and 5% less than that of whole level of Chinese e-commerce platforms, which is 12% and 11% respectively.

In general, the overall customer satisfaction towards JD.com is obviously higher than that of whole Chinese e-commerce platforms according to the comparison.

5.3.8 Problems or Inconveniences Experienced

Question17 is aimed at investigating the problems or inconveniences that customers have met during their online purchasing processes at JD.com. As shown in Table 11, almost half of the respondents (43%) have met problems of damaged packages, customer service not being in time (42%), too long delivery time (42%) and too many useless advertisements in the website (41%), as the most frequent problems that the respondents have met.
### Table 11. Respondents’ problems or inconvenience experienced

<table>
<thead>
<tr>
<th>Problems or inconveniences</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could not find desired product</td>
<td>20</td>
<td>12%</td>
</tr>
<tr>
<td>Fake or inferior product</td>
<td>15</td>
<td>9%</td>
</tr>
<tr>
<td>Wrong size of the product</td>
<td>29</td>
<td>17%</td>
</tr>
<tr>
<td>Damaged packages</td>
<td>73</td>
<td>43%</td>
</tr>
<tr>
<td>Personal information was revealed</td>
<td>12</td>
<td>7%</td>
</tr>
<tr>
<td>Meet problems when paying online</td>
<td>36</td>
<td>21%</td>
</tr>
<tr>
<td>Customer service was not in time</td>
<td>71</td>
<td>42%</td>
</tr>
<tr>
<td>Too long delivery time</td>
<td>71</td>
<td>42%</td>
</tr>
<tr>
<td>Too many useless advertisements</td>
<td>70</td>
<td>41%</td>
</tr>
<tr>
<td>Others</td>
<td>46</td>
<td>27%</td>
</tr>
</tbody>
</table>

On the other hand, only a small number of respondents have purchased fake or inferior products from JD.com, with a percentage of 9% of the total respondents. In addition, there are only 12 respondents whose personal information was revealed via JD.com, which accounts for 7% of the total respondents.
6 CONCLUSION

Chapter 6 provides overall conclusions, as well as gives a brief summary for the whole thesis. Moreover, some suggestions are put forward to improve online customers’ satisfaction for JD.com based on the research results.

6.1 Analysis of the Results

As can be seen from the research result, 83% of respondents chose to purchase online instead of travelling to a physical stores due to the cheaper prices in online shops. From this point, it is obvious to see that price is still the primary factor that drives customers to changing their former shopping style. In other words, price advantage is the major competitiveness for e-commerce platforms to compete with physical stores in the market.

Still, according to the empirical findings at JD.com, among the 170 respondents, the number of respondents who feel “satisfied” or “completely satisfied” with price level is 53(31%) and 30(18%). It means almost only half of the respondents hold a positive view of the price level at JD.com, thus the low price strategy should be taken by JD.com to strengthen the advantages of e-commerce platforms.

According to the questionnaire, only 19% of the respondents choose the way of online shopping instead of physical stores due to the better quality of products in e-commerce platforms. However, it cannot be denied that the internet consumers have also noticed the importance of quality when they choose to purchase a product in online shops.

From the data of empirical findings, among the 176 respondents there are 120 respondents (68.4%) who think the quality factor influences their purchasing decisions at “very strong” level. In addition to the customers’ satisfaction of the product quality at JD.com, 155 respondents think highly of that, with a total percentage of 91%. From this point, most respondents think highly of the product quality at JD.com, which means quality is one of most important competitive
advantages of JD.com.

Overall, the respondents give a higher satisfaction assessment of purchasing services at JD.com compared with that of the other Chinese e-commerce platforms in several.

6.2 Conclusion of the Research

The objective of this research was to provide suggestions to JD.com about how to improve their customer satisfaction by a survey which investigates respondents’ opinions of the services during the online purchasing process. In chapter 1, the research problem was divided into the following four questions:

1. What is the major consuming group of online shopping in China?
2. What are the most important factors that influences internet consumers’ decision-making during the online purchasing process?
3. What do the customers think about JD.com and its purchasing services in terms of quality, price, delivery time, payment security and other factors?
4. What are main difficulties or inconveniences that customers have faced when they purchasing online at JD.com?

According to the empirical findings, the research questions are solved by the following results:

1. The internet consumers who are between 18-39 years old are the major consuming group for online purchasing. In this age group, the frequency of male respondents purchasing online per month is obviously less than that of female respondents. In addition, the percentage of female respondents who have online purchasing experiences is larger than that of male respondents. From this point, the females who are among 18-39 years old should be more targeted by the e-commerce companies than males.

On the other hand, according to the data analysis of the respondents who have no
online shopping experiences, it shows that consumers over 40 years old tend to shop online clearly less than those from the younger group. So, we can assume that the customers above 40 years old are the potential consuming group, who usually are working and earning a high-income level.

2. Quality and price are clearly the most important factors for customers when they have to make online purchasing decisions. Most of the customers choose online shopping instead of travelling to physical stores due to cheaper prices. However, when they have to choose of online products, quality becomes the determining factor. From this point, both the price and quality are the most important factors that influence internet customers’ purchasing decisions.

3. The awareness of JD.com in China is very high, and most of the respondents have purchased products or services previously in this e-commerce platform. In addition, the overall customer satisfaction degree of JD.com is clearly higher than that of other Chinese e-commerce platforms.

During the process of online purchasing, most of the customers think highly of the product quality at JD.com, but hold a neutral view for the price level. Additionally, most of the respondents feel satisfied with the website design of JD.com, but doubt about the privacy of personal information. As for the customer services at JD.com, the overall satisfaction level is not positive. However, most of the customers think highly of the delivery services at JD.com.

4. Damaged packages, customer service being not in time, too long delivery time and too many useless advertisements are the most frequent problems that customers have met during their online purchasing processes at JD.com. Having learned about the problems and inconveniences for the customers, it is possible to make more efforts in this business field.

6.3 Advice to JD.com

Based on the research study, there are some summarized suggestions to JD.com in
order to improve its purchasing services and customers’ satisfaction degree.

The targeted consuming group of JD.com should be focused on customers between 18-39, especially the females. From this point, companies can make some sales promotions aimed at this group, and also make more customized products for this group. Moreover, the customers who are over 40 years old are the potential customers of JD.com, thus the company should make some specific strategies for this group, including advertising.

Price is the most important factor attracting customers to shop online instead of a physical store, and quality is the most important factor that influences purchasing decisions. Therefore, the company should try to decrease the cost of the products, and in the meantime keep its quality. In this way, JD.com can acquire stronger competitiveness in the e-commerce industry.

The company should pay much more attention on the product package, customer service, delivery services and website design. Though these factors are not the determining ones, they affect customers’ satisfaction degree with the company.

In addition, since the last question of the questionnaire was an open question, it collected many useful responses from the respondents, giving advices to JD.com, which can be summarized as the following:

Most of the respondents suggest that JD.com should decrease its price level in order to compete with other e-commerce companies such as Taobao.com and Tianmao.com.

Some respondents think JD.com should expand its product variety thus the customers can have more choice. Moreover, they suggest that JD.com should guarantee its after-sales services, and also make sure the right to returns the products at JD.com.
Some respondents reflect that some of the products at JD.com are off the shelves too fast, especially some electronic products that the customers desire. They advised that some classical but not seasonal products should be kept on the shelves for a longer time in the future.

In addition, some of the respondents suggest that JD.com should cooperate with the new social media to publicize its brands and make more promotions among the customers.

6.4 Suggestions for Future Study

Based on the results, some suggestions and thoughts can be presented for the future study.

As mentioned in Chapter 1, the main limitation of the research is that the research method in this thesis is only an online questionnaire, and there are no interviews or other methods used for data collection. From this point, all the empirical findings in this research are limited by the questionnaire format of study. Therefore, in future study, various research methods should be used flexibly to collect data.

Limited by the time and resources, it is impossible to get respondents living in all areas of China, especially from the remote areas, thus the results of this research cannot represent all customers’ opinions in every part of China. In addition, most of the respondents who participated in this research are from Hubei Province of China, and as a result, this research is suitable for Hubei Province instead of the whole country. In future study, the research should cover most areas of China, and make specific surveys for different areas in order to gather more useful and valid data.
REFERENCES


Education Publishing.


APPENDIX 1

Original Chinese Questionnaire

对京东商城的网购消费者的满意度调查

近几年来，随着电子商务在中国的发展，网上购物逐渐成为了一种主流购物方式（尤其对于年轻的顾客群体）。以下这份关于京东商城的调查问卷是建立在网购消费者满意度模型的基础上，旨在获取消费者对于在京东网购过程中的服务的意见。这份调查问卷可能会花费您 5 分钟填写，其中所有的个人信息不会被泄露，非常感谢您的参与！

基本信息
1. 性别 [单选题] [必答题]
   ○ 男
   ○ 女

2. 年龄 [单选题] [必答题]
   ○ 低于 18 岁
   ○ 18－28
   ○ 29－39
   ○ 40－50
   ○ 50 岁以上

3. 职业 [单选题] [必答题]
   ○ 学生
   ○ 经理
   ○ 行政人员
   ○ 工程师
   ○ 其他

4. 月收入范围（RMB） [单选题] [必答题]
   ○ 低于 3000
   ○ 3001－6000
   ○ 6001－9000
   ○ 9001－12000
   ○ 12001－15000
15000 以上

5. 你来自于中国的哪个地方？ [单选题] [必答题]
   - 新疆
   - 内蒙古
   - 陕西
   - 上海
   - 湖南
   - 江苏
   - 浙江
   - 北京
   - 湖北
   - 其他

以下是针对于网上购物的相关调查

6. 您每月网上购物的次数大概是？ [单选题] [必答题]
   - 从未网购
   - 1-3 次
   - 4-7 次
   - 8-11 次
   - 超过 11 次

请在此结束问卷填写，谢谢您的参与

7. 您能告诉我们选择网上购物这种方式的原因吗？ [多选题] [必答题]
   - 更优惠的价格
   - 更好的质量
   - 节省时间和路程
   - 更多选择范围
   - 我喜欢尝试新鲜的事物
   - 我享受网购的乐趣
   - 在实体店找不到我要的商品
   - 跟随潮流
   - 其他原因
8. 您通常会在网上购买以下哪些种类的产品？ [多选题] [必答题]

- 食物
- 衣服
- 日常用品
- 电子产品
- 化妆品
- 书和影像
- 家具
- 户外用品
- 其它

9. 当您选择网购平台时，以下这些因素对您影响的程度是 [矩阵量表题] [必答题]

<table>
<thead>
<tr>
<th>因素</th>
<th>很不重要</th>
<th>不重要</th>
<th>一般</th>
<th>重要</th>
<th>很重要</th>
</tr>
</thead>
<tbody>
<tr>
<td>公司的名誉</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>价格</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>质量</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>顾客服务</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>支付服务</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>邮递服务</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>售后服务</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. 总的来说，您对自己的在国内电商平台上的网购经历 [单选题] [必答题]

- 很不满意
- 不满意
- 一般
- 满意
- 非常满意

11. 您有过在京东商城网购的经历吗？ [单选题] [必答题]

- 是的，我有
- 不，我没有

在此结束问卷调查，非常感谢您的参与！

12. 在您的京东网购经历中，请选择对以下有关产品因素的满意程度 [矩阵量表题] [必答题]

<table>
<thead>
<tr>
<th>因素</th>
<th>很不满意</th>
<th>不满意</th>
<th>一般</th>
<th>满意</th>
<th>很满意</th>
</tr>
</thead>
<tbody>
<tr>
<td>价格</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>质量</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. 在您的京东网购经历中，请选择对以下有关网页设计因素的满意程度 [矩阵量表题] [必答题]

<table>
<thead>
<tr>
<th>因素</th>
<th>很不满意</th>
<th>不满意</th>
<th>一般</th>
<th>满意</th>
<th>很满意</th>
</tr>
</thead>
<tbody>
<tr>
<td>网页设计</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>多种付款方式</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>个人信息的隐私程度</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>网上支付的安全性</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. 在您的京东网购经历中，请选择对以下有关顾客服务的满意程度 [矩阵量表题] [必答题]

<table>
<thead>
<tr>
<th>因素</th>
<th>很不满意</th>
<th>不满意</th>
<th>一般</th>
<th>满意</th>
<th>很满意</th>
</tr>
</thead>
<tbody>
<tr>
<td>回复顾客咨询</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>提供产品信息搜索和比较</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>让顾客追踪账户或者订单信息</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>允许顾客自己预定产品样式</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. 在您的京东网购经历中，请选择对以下有关产品运输因素的满意程度 [矩阵量表题] [必答题]

<table>
<thead>
<tr>
<th>因素</th>
<th>很不满意</th>
<th>不满意</th>
<th>一般</th>
<th>满意</th>
<th>很满意</th>
</tr>
</thead>
<tbody>
<tr>
<td>包装</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>邮资</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>运输时间</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>售后服务</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. 总的来说，您对在京东商城的网购经历 [单选题] [必答题]
很满意 1 2 3 4 5 很满意

17. 您在京东网购时，遇到过以下哪些问题或者不便？[多选题][必答题]
☐ 很难找到想要的产品
☐ 赝品或次品
☐ 产品尺码不对
☐ 包装损坏
☐ 个人信息被泄露
☐ 付款时出现问题
☐ 顾客服务不及时
☐ 运输时间太长
☐ 太多无用广告
☐ 其他问题

18. 您对京东商城今后的发展有什么好的建议吗？[填空题]

提交成功，谢谢您的参与！
APPENDIX 2

Translated English Questionnaire

A Customer Satisfaction Research of JD.com in China

As the rapid development of e-commerce in China in recent years, online shopping gradually becomes the most popular way among the customers, especially for the young group to purchase whatever they need. This research of JD.com is based on Internet customer satisfaction model, aimed at acquiring customers’ opinions for the online services during the purchasing processes. It will take you about five minutes to fill in, and all the personal information wouldn’t be published. Thank you for your participation!

Basic information
1. What is your gender?
   Male
   Female

2. What is your age?
   Under 18 years old
   18-28
   29-39
   40-50
   Above 50

3. What is your occupation?
   Student
   Manager
   Administrator
   Engineer
   Others
4. What is your monthly income level? (RMB)
   - Less than 3000
   - 3000-6000
   - 6001-9000
   - 9001-12000
   - 12001-15000
   - Above 15000

5. Which part do you live in China?
   - Xinjiang
   - Mongolia
   - Shanxi
   - Shanghai
   - Hunan
   - Jiangsu
   - Zhejiang
   - Beijing
   - Hubei
   - Others

Next is the investigation for online shopping in China

6. How often do you shop online per month?
   - No experience of online shopping (finish the questionnaire here, and thanks for your participation!)
   - 1-3 times per month
   - 4-7 times per month
   - 8-11 times per month
   - More than 11 times per month

7. Please tell us the reasons why you chose to purchase online instead of the
physical stores?
Cheaper price
Better quality
Saving time and distances
Wide range of products to choose
I like to try new things
I enjoy shopping online
I cannot buy it in the physical stores
Follow the trend
Other reasons, such as

8. What kinds of products do you usually purchase online?
Food
Clothes
Daily products
Electronic products
Cosmetics
Books and videos
Furniture
Outdoor equipment
Others, such as

9. When you purchase online, what do you think of the following factors influence your buying decisions?

<table>
<thead>
<tr>
<th></th>
<th>Very weak</th>
<th>Weak</th>
<th>Neutral</th>
<th>Strong</th>
<th>Very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation of the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After-sale services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. In general, are you satisfied with your online shopping experiences in Chinese online purchasing platforms?

**Completely unsatisfied** 1 2 3 4 5 **Completely satisfied**

11. Do you have online purchasing experiences in JD.com?

Yes, I do.

No, don’t. (Finish the questionnaire here, and thanks for your participation!)

12. What do you think of the following factors related to products during your shopping experiences in JD.com?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. What do you think of the following factors related to the website design during your shopping experiences in JD.com?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. What do you think of the following factors related customer services during your shopping experiences in JD.com?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering customer inquiries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. What do you think of the following factors related to delivery support during your shopping experiences in JD.com?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Completely unsatisfied</th>
<th>Unsatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Completely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Delivery price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery time</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>After-sale services</td>
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16. In general, are you satisfied with your purchasing experiences in JD.com?

Completely unsatisfied 1 2 3 4 5 Completely satisfied

17. Have you ever faced the following problems or inconveniences when purchasing in JD.com? You can pick many options.

- Couldn’t find desired product
- Fake or inferior product
- Wrong size of the product
- Damaged packages
- Personal information was revealed
- Meet problems when paying online
- Customer service was not in time
- Too long delivery time
- Too many useless advertisements
- Others, such as
18. Do you have any suggestions or advice to JD.com? Please write it down.

Thanks for your participation!