An investigating of network information
how to influence customers’ online shopping behavior in
China—a case study of Taobao

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Abstract

Background. With the prompt development of information technology, e-commerce in China is becoming more popular. Customers are trend to purchase on web-based store through the Internet compared with the traditional store. Actually, consumers need to obtain much information to do sensible purchase decision, thus, to identify the possible information factors that may influence customer shopping behavior is very necessary to both consumers and retailers.

Aims. This research is aims to investigate the information factors that might influence customer online shopping behavior in China based on a case study of taobao.com which is one of the largest C2C platforms in China. And also it aims to identify the information risks during purchase processes.

Method. In order to achieve the research aims, deductive approach and quantitative method are applied in the whole study. A questionnaire survey is designed to collect primary data based on research objectives and the existent literatures. Snowballing is the main method to collect data and finally there are 67 people responded.

Result. Through the findings of data presentation, the information factors that influence customers’ purchase behavior on Taobao are mainly focus on ‘products quality’, ‘security’, and ‘the reputation of seller’, which cause customers make different purchase decision. While the top three information risk that customer usually encountered on Taobao are ‘false advertising’, ‘information leak’, and ‘system security’, which are significantly affect the establishment of consumer trust.

Conclusion. Although there are some interesting findings, the limitations also exist in this research. The number of questionnaire samples need to increase and the population group should have a balanced distribution but not just focus on certain group in further research. Furthermore, the relevant strategies or solutions of current
risks in online shopping environment can be studied further.
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Chapter 1:

Introduction

1.1 Introduction

This chapter introduces the background information of e-commerce in China, the aims and objectives of this research, the research purpose and scope are also mentioned. Besides, this chapter outlines the structure of the whole study. Finally, a short summary is made at the end of this chapter.

1.2 Background information

With the extensive application of the Internet in e-commerce activities, people has come to depend more on the network, it is imperceptibly changing people’s living ways. The emergence of e-commerce creates a global business revolution and has gradually become a vital business mode in social life. According to Forrester Research (2001), the total number of consumers is increased year by year through using the Internet to purchase products and service. A study from the GFK group indicates that the amount of e-shoppers has climbed from 27.7% to 31.4% in the key European market in 2002, which means nearly 59 million Europeans make use of the Internet for shopping purpose regularly. Not only has the number of online customer grown quickly, the volume of purchase raises over-proportionally as well. Besides, Asia as a rookie, market potential is greater, can be regarded as the sustainable area. The global B2B e-commerce transaction is continued growth since 2002 and in 2007 the volumes of transactions reached 8.3 trillion dollars, maintains a growth rate of more than 40% in subsequent years. Until 2010 the B2B transaction volume up to 26 trillion dollar was 30 times in 2002. As for the situation in China, CNNIN reported in 2011 that the number of online shopper was up to 161 million at the end of 2010, and the Internet penetration rate reached to 35.1%. The annual transaction amount is about 523.1 billion RMB in 2010, relatively growth 109.2% than 2009. China e-commerce
have a rapidly increase in recent years.

These phenomenon and figures point out there are a great number of customers in China through using the Internet for shopping purpose. Indeed, it is not clear what spur them to purchase online and whether these factors could influence customers’ shopping behavior. It prompts the study of investigating what kinds of factors may affect customers to shop online. Moreover, lots of previous studies are focus on consumers shopping behavior and the process of decision making, less of research is concerned about the relationship between network information and customer online shopping behavior. The information factors can be greatly impact on customers’ decision making when shop online, because customers usually need to search for mass of information before purchase. Therefore, it is necessary to develop a comprehensive and in-depth understanding of network information how to affect customers’ behavior and attitude toward online shopping.

1.3 Research purpose and scope

This research is consisting of four aspects. The first aspect is about the motivation that why customers are prefer to choose shop online through using the Internet. Consumers have various motivations in terms of intrinsic factors and exogenous factors. The second aspect is related with customers’ information search behavior and the ways of access shopping websites. Understanding customers’ information needs can better indentify the information factors of online shopping. The third aspect is focus on the possible information factors that influence customer online shopping behavior base on a case study of taobao.com. Testing the different information factors can find out what are customers concerns more so as to help retailers improve information providing. The last aspect is about information risks combine with the risks analysis of shop on taobao.com. In this dynamic information environment, there are various information sources to support for customers’ information needs, which maybe involve inaccurate or false information then damage the trust between
customers and vendors. Therefore, information risks in online shopping environment are also worth to study.

1.4 Research aims and objectives

1.4.1 Research aims

This research aims to explore the information factors that might influence customers’ online shopping behavior in China combine with the case study of Taobao. Also, this research aims to find out the information risks that customers usually encountered on web-based shopping environment especially on taobao.com.

1.4.2 Research objectives

Based on the research aims, the following objectives should be achieved in the context of China e-commerce:

• to investigate the motivations of online shopping
• to evaluate customers’ information search behavior and the ways of access shopping websites
• to identify the influence factors of shopping on taobao.com
• to discover the information risks of shopping on taobao.com

1.4.3 Research questions

• What are the motivations that customers choose to shop online?
• What types of information do customers usually search for when they purchase online and how do customers access shopping website as usual?
• What kinds of information factor may greatly impact on customers’ purchase decision on Taobao and in what extent?
• What are the information risks that customer usually encountered when purchases on Taobao?
1.5 The significance of the study

For vendors, this research can provide reference for e-commerce companies to understand the information factors that customers are concern more, so as to improve the quality of information offer or enhance the security of shopping environment to attract more customers. For customer, this study can help them to know more about the way of information resources acquisition or the information risks that may arise when shop online, which can help customers make more intelligent decisions before purchase. In addition, this research can be as a complementary to previous research in the field of influence factors and customer online shopping behavior.

1.6 The structure of the dissertation

This dissertation is composed of six chapters. Chapter one is an introduction, it introduces the background information of research topic, research purpose and scope, aims and objectives, as well as the study significant and the overall structure of this study. Chapter two reviews the previous literatures which are related with research issues. It divides into five sections: motivations of customer shopping online, customer information search behavior and the ways of customer access shopping websites, information factors that may influence shopping behavior, information risks, and the brief introduction of Chinese e-commerce combine with taobao.com. Chapter three is focus on the methodology of the whole study. It indicates the deductive approach and qualitative method, investigation method, questionnaire design, the advantage and disadvantage of questionnaire, as well as data collection. Chapter four mainly concentrates on questionnaire data presenting and analysis through using various graphs and tables. The data from questionnaire samples is divided into three parts: basic information, customers’ online shopping habit, and Taobao shoppers’ shopping behavior and attitudes. Chapter five discusses the results from the collected data then compared with the relevant points in literature review. The final one is
chapter six which concludes the research findings, the reflection of the whole study, the limitation of survey method, and the recommendation for future study.

1.7 Summary

This chapter gives an outline of this research, which includes the background information of China e-commerce, the research scope and purpose, aims and objectives. Also, the research questions have been identified in terms of the research objectives. Moreover, the research significant is expressed briefly and finally, the whole structure of this dissertation is presented.
Chapter 2:

Literature review

2.1 Introduction

In this chapter, a mass of previous studies and literatures which relate to information factors and customer online shipping behavior in Chinese e-commerce are reviewed and synthesized. All the content is separated into five parts: the motivations of online shoppers, the information search behavior, the information factors, the information risks, and the introduction of China e-commerce and taobao.com.

2.2 The motivations of online shopping

In a foundation level, customer’s shopping behavior is derived by their needs which can be divided into two dimensions (Hirschman & Holbrook, 1982): functional/utilitarian requirement, and hedonic/experiential requirement. The former could guide consumers to consider the purpose of consumption, such as product functional attributes. The latter would guide consumers to consider the subjective aspect, such as product comfort, aesthetics. In a purchase decision, these two kinds of requirements are usually considered simultaneously. For example, a customer may buy a car to go to work from utilitarian purpose, but they may also take into account the purpose of enjoyment driving process, and ultimately to choose to buy a sports car.

Besides, To et al (2007) point out that consumer’s shopping motivation is classified into physiological and psychological. The former is based on physiological needs with the regular, repetitive and habitual characteristics. While the latter is determined by psychological demand, with hidden and diversified feature. However, customer’s shopping motivation is usually formed by a number of factors but not just one. Except for physiological and psychological, there are some other specific shopping
motivations:

2.2.1 The types of Motivation

Social interaction motivation

To consumer, online shopping not only can achieve the function of traditional purchase, also can exchange purchase experience with other customers through the Internet to obtain more products information, in order to make purchase decision and implement transaction (Joines et al, 2003).

Concealment motivation

To these customers who have little shopping experience or not willing to be interrupted by others during the shopping process, or not want others to know the purchased items, the privacy of online purchase and the uniqueness of products can satisfy with these requirements in terms of the statement from Flick (2009).

Enjoyment motivation

Customers usually need to browse various websites to select and compare different products before purchase. It not only can see a superb collection of commodity picture, also sometimes can enjoy the wonderful advertising, this brought mental relaxation to customers (Joines et al, 2003). With the development of microelectronic technology, software and network multimedia environment, online shopping nowadays make customers feel more funny and enjoyable.

Convenience motivation

The traditional purchase needs to experience a serious of processes. Customers must start from home to store, walk around in the shop and stop to select goods, then make
a payment, package goods, deliver cargo and so forth (To et al, 2007). That is, customers purchase goods in traditional way need to spend much time and physical energy. In contrast, virtual store is open 24 hours a day, 365 days a year, which means customer can purchase items at any time. Moreover, the door-to-door delivery services and the online payment system are also very convenience to customer only to spend several minutes can complete the transaction.

2.2.2 Motivation factors

Due to customer’s online shopping motivation can greatly impact on shopping behavior, understanding the influence factors become more important to internet vendors. In general, consumers make decisions are based on personal preference or the utility of products, so when consumers choose to purchase, they are more concern on the direct effect brought by online shopping which can be a function or utility perception to products, such as ‘usefulness’ and ‘ease of use’, and also can be a hedonic perception, such as ‘enjoyment’. In addition, there are a number of other factors may affect customer shopping motivations. Monsuwe et al (2004) divided these factors into two categories: intrinsic factors and exogenous factors.

2.2.2.1 Intrinsic factors

Intrinsic factors is belongs to customer’s inherent characteristics can directly affect consumers’ online shopping motivation, including ‘usefulness’, ‘ease of use’, and ‘enjoyment’ factors.

Usefulness

It is defined by Davis (1993) that usefulness is the individual’s perception that making use of the new technology will improve his or her performance. The new technology
in online shopping context can be regarded as purchase through the Internet, and the online shopping experience can be as the expression of personal performance. In other words, usefulness relates to customers’ perception that making use of the Internet as a purchasing medium to improve the consequence of online shopping experience. All these perceptions may affect customers’ intention and attitude of online shopping. For example, virtual store provides a huge number of products, and the timely, accurate products and service information. Also, there is no limitation of purchase location and time in virtual store, thus can considerably reduce customer’s shopping time and physical energy consumption.

**Ease of use**

‘Ease of use’ is considered as the individual’s perception that making use of the new technology with little effort (Davis, 1993). That is to say, consumers can shop online easily through using the Internet. The convenient order processes, the simple and easy-to-understanding user’s interface, the easy payment procedures and refund system, all these aspects are belong to the scope of ‘ease of use’.

**Enjoyment**

‘Enjoyment’ is drives from the fun and pleasure of online shopping experience, rather than from the completion of shopping task. Customer’s purchase behavior is incidental to the online shopping experience. Therefore, ‘enjoyment’ reflects consumers’ perception of the potential entertainment to Internet shopping. Childers et al (2001) noted that ‘enjoyment’ is a consistent and powerful predictor of customer’s online shopping attitude. If customers enjoy their previous purchase experience, they would have a more positive attitude later, and are more likely to use the Internet as a medium for shopping.

**2.2.2 Exogenous factors**
Although ‘usefulness’, ‘ease of use’, and ‘enjoyment’ are regarded to be as the foundational factors of online shopping motivation, there are many other factors play a regulatory role as well. Therefore, a total four key exogenous factors are discussed as following.

**Customer traits**

‘Customer traits’ as the characteristics that customer has can influence online purchase behavior, includes demographic factors and personality characteristics. Demographic factors such as age, gender, education background, and income can moderately influence customer’s online shopping attitude (Monsuwe et al, 2004). According to the statistical report from CNNIC (2011), the younger male adults especially these who between 20-29 years old are more interested in online shopping. Moreover, the number of online shoppers with lower education degree (e.g. high school) and with lower monthly income (less then 500RMB) is increased continually.

Also, personality characteristics can moderately affect the relationship between e-shopper attitude and the basic factors of ‘ease of use’, ‘usefulness’, ‘enjoyment’. The relevant personality characteristics are ‘expertise’, ‘self-efficacy’ and ‘need for interaction’ (Monsuwe et al, 2004). ‘Expertise’ means the knowledge or skill of individual’s. In order to shop online, customers need to master the basic knowledge of computer using, also need to learn the skills how to search for the desired products information. Once customers master these basic knowledge and skills of Internet purchase, the relationship between customers’ attitude and ‘ease of use’, ‘useful’ will attenuate due to these factors then are less likely to influence customer form a positive shopping attitude. ‘Self-efficacy’ relate to individual’s belief that they have the ability to perform a certain task. Customers with low self-efficacy implies they are feeling uncertain and lack of comfortable when shop on the Internet. Besides, ‘need for interaction’ refers to the significance of the interaction between customers and service
providers. Because of the help-buttons or search function instead the interpersonal communication with a salesman or service employee in online shopping environment, thus, customers with high ‘need of interaction’ are tend to avoid shopping online and more likely to shop on physical store. On the contrary, customers with low ‘need of interaction’ will be more willing to purchase on the Internet (Limayem, 2000).

**Products characteristics**

Consumer purchase decisions are affected by the types of products or service as well. Some types of products are more suitable for shop online than others. The products that in defect of physical contact is usually difficult to attract customers to purchase because customers lack of direct perception to them. Therefore, the explicitly standardized and well-informed products such as CDs, books, have a greater potential for online sell. On the contrary, the personalized products like perfume, cosmetics and cars which require personal experience or specific knowledge, the attraction relatively small to online shoppers (Elliot & Fowell, 2000).

**Previous online shopping experience**

Previous experience plays an important role on customer’s online shopping intentions. Customers estimate their online shopping experience usually depend on the perception of products information, payment form, delivery policy, service quality, information risk, privacy and security, user interface, and entertainment (Monsuwe et al, 2004). If customers’ prior shopping experiences produce satisfied results then is estimated positively, it will guide them to shop online continuously in the future. Otherwise, e-shoppers are not willing to engage in online transaction any longer with the negative judgment in terms of the previous experiences.

**Trust in online shopping**


Trust is one of the most important factors for online shopping intention. Due to many consumers lack of experience, shopping online then is considered as a challenge. In traditional shopping ways, customer can communicate with sellers face-to-face and ask whatever they want to understand, it is easy to establish customer trust. But in online shopping context, physical salesman is substituted by help-bottoms. This new shopping form thus may get rid of the foundation of customer online shopping experience. Moreover, online shopping contains some risks for customer because they cannot check the quality of goods physically, or their personal information may be leaked out due to the insecurity shopping environment (Rohm & Swaminathan, 2004), which are also influence customer’s trust to online purchase.

2.3 Customer information search behavior and information access

There is no doubt that the Internet has a significant effect on customer’s information search behavior. The Internet can provide the quality and quantity of customized information for individual with minimal cost and efforts, so as to support consumers make efficiently purchase decision more efficient. It is conducted by DeSarbo and Choi (1999) that customer’s information search behavior embraces internal and external information search. According to the definition, internal search includes personal memory and appeared earlier than external search. While external search relates to everything except memory when seek information online. However, these two search behaviors are relevant that external search is relies on memory in reality and the whole information search process is recurring. Indeed, external information search can be classified into pre-purchase, goal-directed/problem-solving actions, and continuous, regular, general/ongoing actions. For example, Holbrook and Hirschman (1982) have investigated the continuous information seeking behavior is based on hedonic purpose.

Consumers may start to purchase or participant in relevant activities when they have shopping motivation. If the needed products located a short distance away, customers
can carry out the purchase activities immediately in order to meet the demand. But when the needed goods are not available to purchase, or that their demand cannot be satisfied immediately, they will store the demand in memory, then pay more attention to collect the relevant products information correspondence with the demand, in order to make purchase decisions. Beatty and Smith pointed out that there are four key aspects of customers’ information source (Perterson & Merino, 2003):

(1) Media: obtain information from television, radio, newspaper, magazines or other mass media.
(2) Individuals: obtain information from families, friends, neighbors, colleagues or other personal interaction.
(3) Sellers: this is a major information source for customers, including advertising, staff’s oral introduction, products package, product introduction manual and other information to be provided by sellers.
(4) Personal hands-on experience: customers obtain information from the process of personal contact and use of commodities.

The above four sources of information, ‘sellers’ is the most important form. From customers’ view, this type of source has a notification function, is specific and reliable to customer. But ‘individuals’ and ‘personal experience’ only can help to check and verify. To the enterprise, ‘sellers’ can be controlled. Consumers can through the commerce channels to understand the enterprise of this product, and then to purchase.

2.4 Influence factors of online shopping

Customers can search information and purchase goods or service directly through the Internet based shopping environment. Kolesar et al (2000) discover that the internet shopping context is mainly based on the appearance of cyberspace such as images, and videos of the products, but does not relies on the actual shopping experience. Shopping online just like shopping through a physical catalog because customer
cannot touch or feel the products personally, therefore, information presentation, navigation or the quality of information are considered as the significant factors of establishing customer online shopping trust. That is, internet retailers need to focus on information quality and the information available in online shopping environment (Park & Kim, 2003). The former such as the quality of webpage information, the latter is often considered to involve products or customer service information, convenience and personalization information to maintain customers. According to the previous studies, information factors can be classified into four aspects: products, price, customer service, navigation, and online security.

2.4.1 Products

Products attribute

It is unquestionable that the online market is different from the traditional market and online customers have different demand characteristics to products compared with traditional customers. That is, not all of products are suitable for selling online. In terms of the trait of online consumers, retailers should consider products’ novelty such as new technology products and fashion products (Wu, 2003). These kinds of products would be more attraction and usually with a good market prospect.

The range of products

A rich and specific product assortment would be attracting more customers because they can search for the desired products easier. It is illustrated by Park and Kim (2003) that a large online store is less attraction than a small store at transferring site traffic to sale due to customers are hard to find the products that they interested. It will be more effective if online retailers provide easy-accessed products information such as price-related information to reduce time consumption of information seeking. Moreover, online vendors provide relevant hyperlink for customer to compare price or extend their selections.
Products quality

In the virtual Internet environment, consumers can break through time and space constraints to purchase, which is also an advantage of online shopping. However, customers cannot directly contact the needed products, to understand the detailed information only through products description or some images. Some of conservation consumers are often changes their mind to purchase online due to they cannot contact these products directly and the quality cannot be guaranteed. Hence, the quality of products is an important factor that influences customers’ purchase decisions.

2.4.2 Price

From the consumer's perspective, products price is not the unique factor that affect customer make decision, but can be as a very important factor that must be considered when customers purchase online. To general merchandise, price and the demand are often shown as an inverse relationship, to same goods, the lower the price the larger the sales (Hsu et al, 2006). The reason why online shopping so popular, one of the most important factors is the products price generally lower than physical store.

In addition, consumer has a price psychological expectation to online shopping. That is, although the commodity on the Internet needs to spend money, the price also should be lower than traditional channel. On the one hand, this is because the Internet start-up and development are based on the free strategy and wins the support among users, has already gained the successful commercial operation. On the other hand, the Internet as an emerging market can reduce intermediate charge and some additional information costs compared with the traditional marketing then can greatly reduce the product cost and selling cost that is also a tremendous potential of Internet business (Park & Kim, 2003).
2.4.3 Customer service

Online shopping is a complicated process that can be separated into lots of sub-processes such as information searching, online transactions, and customer interactions. Customers are less likely to estimate every sub-process in detail when purchase online, but will concern more about the service that sellers provided as a whole consideration (Van Riel et al, 2001). In the decision-making process, customers usually need a careful, meaningful, continuous communication when purchase goods or service both in physical stores and online stores, so as to learn more about the information of products and service such as payment methods, refund policy, gift service. For online customer, a high standard customer service means they can obtain more potential benefit from the Internet because it is much easier to make a comparison with traditional channel such as in products technological features (Lee & Lin, 2005).

2.4.4 Navigation

This factor is relevant to user’s interface of online store setting such as store layout design, organization characteristics and whether it is easy to use or access. It has been claimed by Nielsen and Norman (2000) that the factor of website interface design has a great impact on consumer attitude and cognitions of the trust of suppliers. As user interface of online store website will affect the interaction of products or service information between customers and e-commerce retailers, a well-designed user interface could reduce the search cost of customers’ and minimize the time consuming of shopping process. Online shopping is considered as pleasurable and enjoyable if the website is fast, uncluttered and easy to navigate for customers, such kinds of websites will reduce shopping time and customers may figure out how to purchase online more effectively in terms of their cognitive effect (Li & Zhang, 2002). Furthermore, the help function should be included in navigation which will help customers solve the encountered problems. Majority of online stores website provide
serial navigation function such as search engine, site map to support customers search or purchase online.

2.4.5 Online security

The security of online transactions as a dominating factor is continues discussed in e-commerce (Elliot & Fewell, 2000). From the consumer’s point of view, lots of studies (such as Furnell & Karweni, 1999) have pointed out that they lack of confidence to the security of online transactions, thus pay more attention to the confidentiality of personal information and due to distrust online suppliers. Customers are extremely concerned on the privacy and financial statement compared with other aspects. Although many of online store sites provide customer personal information protection policy and claim to guarantee the security of online transaction, they do not give the specific information of how the transaction process and personal record are secured in online shopping context. Besides, Roy et al (2001) claim that although information technology has much advancement on the basis of insuring a higher level of security, establishing customer trust in online shopping is still a major hurdle to e-vendors.

As stated by Miyazaki and Fernadez (2001), online consumers are anxious about the system security of third-party fraudulent behavior, especially fear of their own credit card information to be revealed out. Indeed, this situation is real existence in today’s ecommerce environment, customers’ financial information or identify code may be stolen during the payment process. Accordingly, for information security considerations, customers are more likely to abandon shopping online if the security cannot be guaranteed, even though there are many benefits of online shopping such as the lower price, the wide range of products (Brown & Muchira, 2004).

2.5 Information risks
Electronic commerce in 21 century is an inevitable trend, while the risk is the biggest obstacle to influence its development, especially in the development of ecommerce in China is still in initial stage, have a clear understanding to risk is particularly important. From the characteristics of ecommerce, the risk can be divided into internal risk and external risk, information risk is belongs to the external risk. According to Chen & Qin (2008), information risk is considered as in the information sharing process, the information inaccuracy, hysteresis or other adverse consequences result from information asymmetry and the severity of information pollution phenomenon. In general, information risk is from information asymmetry and information security risk.

2.5.1 Information Asymmetry

Kumar and van Dissel (1996) shows that information asymmetry is the problem in controlling performance that causes a risk of evading by a business partner. Also can be expressed as the respective business parties are grasp different information, the seller usually have more complete information while the buyer with incomplete information. Briefly, information asymmetry is that in market transaction, when one party of the transaction cannot observe or supervise the act of the other party, or the observation and supervision cost relatively high, the information will be unable to obtain completely, thus, both parties of the transaction will grasp asymmetrical information. The situation of information asymmetry in the market generally has two forms: the sellers master more information than the buyers, and the buyers master more information than the sellers (Salam et al, 2003). The former is the major form in most commodity market. In the process of online purchase, customers need to search for various products information to make decision, include the accurate products function description, the lucid price information, the trustworthy commodity information from website forum, the security of credit card information on the
website and so forth. The Internet just like an information hodgepodge, many businesses parties provides false information driven by personal interests but to disregard the interests of the consumers. Generally, the result of information asymmetry includes adverse selection risk and moral risk.

2.5.1.1 Adverse selection risk

Theoretically, one of advantages of e-commerce is through a variety of network technology enable customers obtain and access the required information fast and conveniently, which can also achieve information sharing (Chen & Qin, 2008). However, the business enterprises often from their own interests, hiding much relevant products information as it like commercial secret and do not share with customers. Consequently, the seller has more goods information but the buyer only with less information, then cause customers are unable to accurately evaluate the quality and price of products often with a market average bid, finally result in the seller with high-quality products withdraw from the market and in the market to trade continuously is usually the seller who have low-quality products.

2.5.1.2 Moral risk

Moral risk is mainly performed as fraud behavior. As the characteristics of the Internet, consumers obtain information usually depend on the posted massages or advertising from sellers, then in terms of these information make judgments or choices such as price, products function, it maybe include false information. For instance, customers cannot receive the goods after payment, or provide the poor quality products to customers and not consistent with the description, or not implement the post-sale responsibility. It is reported by Miyazaki and Fernandez (2001), there are 56.4% of customers have encountered the unauthenticated information when shopping online, while 40.9% respondents had met the commitment of online service but not fulfilled by sellers, and 36.1% online shoppers pointed out they cannot contract the complaint
center or their complaint telephone or mail is ignored directly. Furthermore, some swindlers utilize deceptive emails or false website to bilk customers, then victims’ financial information such as credit card number, account detail is tend to be disclosed. The scammers usually disguise themselves as bank staff, online retailers or credit card companies to lure users enter personal information, once input the information, it will be stole by the hidden viruses. An investigation shows that there are more than 5% people will make response to these scams among the users who have experienced fraud information (Contantinides, 2004). All these fraud behaviors make customers lose confidence to online purchase. Therefore, online retailers should provide customers a reliable and secure information environment to reduce the situation of information asymmetry.

2.5.2 Information security risk

At present, there is no come to an agreement on general definition of online shopping risk by scholars but information security is a widely recognized field of e-commerce risk (Ngai & Wat, 2005). As Greenstein (2000) views that information risk is associated with the possibility of loss personal confidential data or the destruction, generation, or making use of data or programs that harms another party physically, mentally or financially. Information security risk may cause customer uncertainty, especially in the context of online shopping. It is mentioned that information security and privacy are relevant to the uncertainty connected with how personal information is operated by online establishers and who has right access to it (Tsai & Yeh, 2010). Personal information in a digital form can be easier copied, spread, and integrated, which enable online shoppers to establish exhaustively description of individuals. Consequently, this information could cause a serious threat to privacy of not appropriately consumers with personalized services and other advantages (Malhotra, 2004).

Through the open network of online transaction, a large number of transaction
information such as payment information, customer order information, negotiation information, confidential business documents is stored, transmitted, and processed in computer system. Actually, the threats of information security are usually from many aspects and continually changed. The more common threats are unauthorized access, malicious attacks, computer virus and other aspects such as physical damage, personal destruction and natural disaster (Forsythe et al, 2006). Therefore, the information security technology of network system is extremely important in the online shopping environment and consumers’ information security need to be guaranteed.

2.6 E-commerce in China and Taobao

E-commerce has a great development in China since 1997, as the largest internet market in the world there are more than 450 million users in recent years, online shopping turnover up to RMB 59.4 million in 2007 and expected to reach RMB 406 billion by the end of 2011 (Reuters, 2011). However, China’s e-commerce marketplace is still unsteady and only a few e-commerce enterprises (such as Alibaba.com) succeed because there is no standard rule for this industry, lots of successful business strategies or models of e-commerce in developed countries cannot be applied in china due to the different market economic system (Lin et al, 2008). At present, C2C is the main form of e-commerce in China, but the popularization rate is still relatively low, less than 30% of Internet users use it.

2.6.1 Chinese online auction platform

Customer-to-customer shopping website refers to an electronic internet-facilitated medium that doing business between customers using a third party. Online auction is the most common form of C2C. In China, the four dominating C2C shopping website includes taobao.com, paipai.com, eachnet.com, and youa.com. Taobao.com is one of the biggest online auction websites in China, which is founded in 2003 by Alibaba.com with $56.3 million register capital. Since established, it has maintained
faithfulness and sincerity with customers and in 2005, it has ranked top one in online shopping market in China with 70% market share. By the end of 2006, exceed 30 million users have registered on Taobao and the volume of transactions in 2006 is reached $2.1 billion (Lin et al, 2008). According to the report from CNNIC (2010), the number of Taobao users is still at the top one, and the permeability rate of users is up to 91% far more than other auction websites. Moreover, taobao.com occupies 83.5% of the total amount of transaction in C2C market while Paipai only account for 11.5%, which is a joint-venture enterprise between Sina (Chinese portal firm) and Yahoo. Then are eachnet.com and youa.com take up smaller proportion. The former is a subsidiary of eBay while the latter is belonging to Baidu group which is the largest Chinese search engine.

2.6.2 Factors of shopping on Taobao

Low price

As I mentioned before, price is a significant factor that affect customers’ online shopping behavior. The products on Taobao usually direct from the producers because of the sellers usually have a good relationship with those manufacturers after long term cooperation, thus, the cost can be lower than the products that through the normal marketing channel, the price bided by Taobao retailers then relative lower (Lu et al, 2007). Moreover, special offers are frequently provided on Taoabao especially in festivals such as Women’s Day, Valentine’s Day. Some popular commodities will be sold in very low price in order to attract more customer join in Taobao.com.

Security system

As one of the biggest customer-to-customer online auction website, taobao.com provides an online virtual transaction platform. Every registered user can possess an online virtual store and their products for sale can be displayed in words, images or videos. If customers are interested in certain products and auction them, there are
various payment ways to be provided include pay in cash and bank transfer. Alipay as a third party payment tool is applied as well (Lin et al, 2008). The greatest advantage of Alipay is that can avoid online fraud and customers’ personal financial information can be protected well. The detailed processes of this type of payment as follows: after the retailers and the customers agree on the transactions, the customers transfer the correct money to Alipay, then Alipay inform the retailers this information and require the retailers deliver products to the customers, if the customer satisfy with received products, they will confirm the information through Alipay, then Alipay transfer this money into the retailers’ account. Such a payment way can effectively avoid fraud behavior and promote online purchase more reliable.

**Seller reputation**

With the fast development of e-commerce, a growing number of online transactions need to be fulfilled between customers and retailers who may have little or no previous communication with each other. This situation could inevitably bring risk to both parties of transactions. In a typical B2B Chinese auction website such as Taobao and eachnet, the risk in the transaction may appear such as sellers do not deliver the auctioned items, the delivery time is delayed, or buyers do not make a payment for the auctioned goods. One of reliable measures is implement the relevant law to reduce these risks. However, because of the cost of implement a contract with protection law is higher than the worth of transactions, there is no such enforcement law that supervises online retailers and customers. Instead, the major auction websites have a reputation mechanism that enable buyers to rate and edit comments in terms of their own experiences (such as the quality of products and delivery speed) after the close of transaction (Hou, 2007). Meanwhile, Taobao.com provides such a reputation mechanism to customers. It includes the evaluation of the consistency of the real commodities and seller’s description, the service of sellers, the delivery speed of sellers’ and logistics. And the assessment is depending on the ‘star’ standard, the highest level is five stars with the customer absolutely satisfaction. According to this
standard, new customers can well understand the real information of the desired products so as to make appropriate purchase decisions.

2.6.3 The barriers of shopping on Taobao

China has the resources, the measures, and the motivation to become a central role in the global electronic commerce industry but nowadays it far behind other countries such as US, UK due to the market size and scope. Particular in business-to-business transactions, the growth is faced challenge. The key problems of China e-commerce involve an inadequate understanding by enterprisers about the complicacy and dynamics of e-business environment, cause the difficulty of website and electronic banking access, the insufficient products supply and the poor delivery system, as well as security problems (Ernst & He, 2000). Also according to the investigation of Ernst and He (2000), China’s e-commerce retailers generally cannot provide the expected benefits that customers learned from other countries, such as the reduced products prices are lower than those in physical stores; superior customer service that is providing 24 hours a day, seven days a week; and reliable payment or delivery system; as well as the selected commodities often can be provided a no-risk refund. Meanwhile, customers are also encountered many risks on Taobao.com, such as false website advertising, false brands, fakes, poor customer service, cheating through credit card and so forth. Furthermore, it is stated by Lin et al (2008) that some sellers provide false products information to customers involves inauthentic introduction, false images or videos for their own interests. Hence, it is still difficult to establish trust between internet retailers and shoppers.

2.7 Summary

This section reviews and synthesis the previous studies about information how influence customers’ online shopping behavior in China. To sum up, the first part is discussing the motivations of customer choose to purchase online in four aspects, and
then is about how customers access shopping website and their information their information search behavior. Follow this, five key factors that affect customer purchase behavior is mentioned. Then is regarding the two kinds of information risks that online shoppers usually encountered, information asymmetry and information security risk. Finally is about the instruction of China’s biggest C2C auction website taobao.com, and the reasons why customers prefer to purchase on Taobao. However, the previous literatures are only mentioned the three advantages of shopping on Taobao: ‘low price’, ‘seller reputation’, and ‘system security’ but less discussed the possible information factors that influence customers purchase on taobao.com, such as the range of products, customer service may also greatly impact on customers’ purchase decisions. Therefore, it is necessary to study further in the following chapters.
Chapter 3

Methodology

3.1 Introduction

Research methodology is refers to a science of studying how research is scientifically to solve the research problem (Kothari, 2004) and to adopt a measurable and consistent methodology in the whole research is very important. There are two types of research approaches: deductive and inductive. Deductive approach is starting with a perspective or hypothesis then to test whether the collected data support or disprove it. While inductive approach is starting with a question or problem then to look for what conclusions can be obtained from the data (Saunders et al, 2007). Moreover, research method is mainly divided into quantitative and qualitative which can be applied in different types of research and the term is typically regarded to involve research design, data collection and data analysis. Quantitative method involves the creation of data in quantitative form with severe quantitative analysis and rigid fashion (Bryman, 2004). For instance, testing the number of times people do something under certain situations. While qualitative method is focus on subjective evaluation of attitudes, perspectives and experience. For instance, asking someone how they feel about a certain condition. Ideally, a comprehensive research should attempt to mix both quantitative and qualitative methodologies but it is not always possible, usually because of time and financial constraints (Bell, 2005).

My research aims is to investigate the possible information factors that affect customer online shopping behavior in China and the information risks based on a case study of taobao.com. In this chapter, the method that applied to my research would be discussed. The deduction approach and quantitative method are adopted to evaluate the research issues. It also describes the questionnaire design and the techniques how to collect and analyze data.
3.2 Research approach

In this study, the methodology is involves both primary and secondary research. Primary research refers to the use of immediate data which does not already exist in the specific field (Kothari, 2004). The common ways of collecting primary data include questionnaire, survey, interview, and focus group, which could directly indicate the relationship of potential phenomenon (Gray, 2009). In this dissertation, the primary data plans to collect from Chinese adults especially who have experienced online shopping in order to evaluate their shopping habits and motivations in current days. While the secondary research is focus on the existence data which has been collected by precious scholars or researchers. As time goes on, customers’ online shopping habit and behavior may be changing with the development of information technique. Therefore, only depend on secondary data from literatures as the evidence is not sufficient to analyze the research questions. Accordingly, it is valuable to collect primary data on the basis of secondary data in this research.

3.3 Questionnaire survey

3.3.1 The advantage and disadvantage of research questionnaire

The questionnaire is adopted for quantitative research method to collect primary data. Questionnaire is a very common way that supports researchers to test participants’ attitude or behavior in certain task. There are several advantages of doing questionnaire. Initially, questionnaire is a fast and convenience way to collect data. Researchers can send it to large number of people in a short time through the Internet whatever people online or offline and is easily to receive the feedback from participants as well. Secondly, questionnaire is more likely to avoid bias or errors because the designed questions can reduce the subjectivity of responders and distinguished with interview, the feedback is mainly from their personal experience or perspectives. Moreover, questionnaire is a cheap way. Researchers can only send e-mail to others through the Internet then collect feedback with free payment. Also,
there are many online survey websites provided to users for free and most of them are easy to operate. In addition, questionnaire is usually antonymous to participants and there is no need to provide personal name or some specific information. Thus, participants are more likely to help researchers fill in due to the smaller risk. However, questionnaire also has drawbacks. For example, researchers should not design too many questions so that participants are not willing spend much time to do it. Because of this, researchers cannot ask questions in-depth, the collected result maybe more superficial.

3.3.2 Questionnaire design

The questionnaire is designed to help find out the answer of research questions. Hence, the quality of questionnaire is very important to achieve those goals. A good questionnaire should be objective, rigorous, accurate, and reliable (Bell, 2005). According to the statement from Saunders et al (2007), there are many principles need to comply when designing questionnaire. As I mentioned above, the length should be controlled appropriately otherwise the effect will be reduced. Secondly, the format of questionnaire includes closed questions and open questions. The closed questions usually designed in multiple-choice form, while the open questions should be asked in unprompted views. In addition, the overall arrangement and sequence should appropriate and remove the unnecessary numbers or headings, add some suitable titles or divide into different stages of the questions make participants understand better.

After designing the questions in terms of the above principles, the designers need to check the questionnaire again before publishing, such as the grammar and spelling mistakes, whether the word space is appropriate, or whether there are any ambiguous sentences. All these problems need to be avoided in the final version so as to guarantee the quality.

About my questionnaire, I also followed the above principles to design and checked
each of sentences before publishing. The questionnaire is sent by e-mails and online chat software with the method of snowballing. To be honest, I want to randomly collect 60-80 samples, through these ways the size of my questionnaire can be enlarged and the time consumption can be also reduced. After collection, the data will be indicated in charts or tables to analyze.

3.3.3 Structure of questionnaire

There are 20 closed questions in my questionnaires but do not include open question because participants are often reluctant to fill open questions according my personal experience. The whole questionnaire is divided into three parts. The first part is about the basic information of participants. The second part is the general information of customer online shopping habit. The third part is concerned on the shopping behavior and attitude of Taobao shoppers.

Part one: Basic information

Question 1: Your age
Question 2: Your gender
Question 3: Your education background
Question 4: Your occupation

These four questions are about participants’ personal information and aims to identify demographic characteristics of targeted group in Chinese e-commerce environment.

Part 2: Customer online shopping habits

This section includes 5 questions from Q5 to Q11.

Question 5: Do you have any experience of online shopping?
Question 6: What is the frequency that you browse shipping websites?
Question 7: What kind of information do you usually look for when shopping online?
Question 8: How do you normally access shopping websites?
Question 9: Why do you choose to purchase online?
Question 10: To what extent do the following reasons make you not want to purchase online?

Question 11: Will you try to purchase online if these problems improved?

Q5 aims to find out the proportion of consumers experienced online purchase. If the participants select the answer ‘yes’, it requires to answer the following questions. If no, he or she needs to turn Q10 and Q11. These two questions are designed to investigate the reason why they are not willing to purchase online and their attitude in further purchase respectively. Q6 is used to evaluate the browsing habit of Chinese customers to shopping website. While, Q7 is designed for identify the information needs of customers, which is related with customer online shopping motivation. And Q8 is to find out the information sources that customers usually access. This is a multi-choice question due to customers may access shopping website through many information sources. Then, Q9 aims to identify the shopping motivations of customers.

**Part3: shopping behavior and attitude of Taobao shoppers**

This section is only focus on the customers who have the experience of shopping on taobao.com. Without a doubt, the size of sample will be reduced because not everyone experienced purchase on taobao.com. This part includes the following questions:

Question 12: Have you ever purchased anything on Taobao before?

Question 13: What products and service do you usually purchase on Taobao?

Question 14: How often do you purchase on Taobao?

Question 15: What is your maximum spending on Taobao at one time?

Question 16: How do the following information factors affect your decision to purchase on Taobao?

Question 17: Are you satisfied with the website design of Taobao?

Question 18: Have you ever experienced what you consider to be a ‘risk’ on Taobao?
Question 19: To what extent, the following risks affected your purchasing decision?
Question 20: Considering the previous question would you still purchase on Taobao later?

Q12 is to evaluate the popularity of taobao.com and to test the statement that taobao.com is very popular in China from literature review. If someone has never purchased on Taobao, he or she need specify the websites that they prefer to purchase and also they have finished this survey. Q13 is to find out the products or service that people are more likely to buy on Taobao, which is connected with customer’s information search behavior. From Q14 and Q15, customer’s shopping attitude can be evaluated through the purchase frequency and the maximum spending at one time. Q16 with the ranked choice of each variable, the influence degree of information factors on Taobao can be investigated, which is related with shopping motivation. Then is the Q17, about the website design of taobao.com, will help to test the satisfaction of website usage. Website design can also impact on customer shopping behavior. Q18 and Q19 are tested for information risk when customer purchase on taobao.com and to what extent those risks affect purchase decision because of each risk also to be ranked in different degree. While, Q20 is help to estimate the purchase attitude on taobao.com in future.

3.4 Data collection

My target group is focus on the Chinese people who are more than 18 years old especially someone has online shopping experience. The Chinese people include oversea and domestic Chinese people. Thus, there are only 55 out of 67 respondents is valid. Moreover, the participants who are totally skipped questions are not valid as well. The participants that I chose in random by e-mail and online chart software are main focus on my friends. Because through the internet to collect questionnaire is the most convenience and fast way, it can save much time and energies. And I spend a
week to collect totally 67 participants for my research.

3.5 Data analysis

Next chapter is focus on the data analysis on the basis of the collected samples. In order to create quantitative result, the data will be represented in charts or graphs by using Excel spreadsheet and Word drawing tool. Firstly, demographic profile from basic information part in questionnaire will be used to indicate the characteristics of respondents. Then, the data will help to analyze the general information about Chinese people shopping online. Finally, it will help to find out the information of Taobao shoppers’ shopping behavior and attitude compared with the point in the literature review.

3.6 Limitation of methodology

The biggest limitation of this methodology is no sufficient size of samples for data analysis due to the time limitation. Also, the collected samples are mainly from my friends who are around 20-25 years old. Thus, the gathered data can only represent a part of Chinese online customers’ perspective, and it may be not accurate and objective enough for the final result.

3.7 Summary

This chapter has explained the methodology of my research. The deductive approach and quantitative method is applied in this study. Meanwhile, questionnaire is the primary way of data collection from participants. The questionnaire design, the advantages and disadvantages of questionnaire, the ways of collect respondents, and the target group are mentioned above. Furthermore, the limitations of this methodology are expressed as well.
Chapter 4

Data presentation and analysis

4.1 Introduction

This chapter concentrates on data presentation and analysis from the questionnaire about network information how to influence Chinese customers’ online shopping behavior combine with an investigation of taobao.com. As I mentioned before, there are totally 67 random respondents but only has 55 respondents are valid. The statistical findings are presented and discussed in three parts which are basic or demographic information, customer online shopping habit in China, shopping behavior and attitude of Taobao shoppers. These data are presented by charts, tables or graphs through using Excel spreadsheet and Word drawing tool. Some of relationship between different variables can be presented as well (see Appendix 2: Tables).

4.2 Demographic analysis

In this section, the demographic features of Chinese online shoppers’ are evaluated from age, gender, education background, and occupation profile. The overall number of respondents in this section is 66 due to 1 respondent skipped these questions.
4.2.1 Gender analysis

Chart 4.1 Gender profile

![Gender Pie Chart]

Table 4.2 Gender profile

<table>
<thead>
<tr>
<th>Gender</th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>34</td>
<td>51.5%</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>48.5%</td>
</tr>
</tbody>
</table>

As we can see from the pie chart, the percentage of male and female is almost the same, with 51.5% of male respondents and 48.5% of female respondents. Table 4.2 shows there are totally 66 respondents including 34 male respondents and 32 female respondents. The number of male is two more than female’s.
4.2.2 Age analysis

Chart 4.3 Age profile

Table 4.4 Age profile

<table>
<thead>
<tr>
<th>Age</th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>34</td>
<td>51.5%</td>
</tr>
<tr>
<td>25-30</td>
<td>29</td>
<td>43.9</td>
</tr>
<tr>
<td>31-40</td>
<td>2</td>
<td>3.0%</td>
</tr>
<tr>
<td>41-50</td>
<td>1</td>
<td>1.5%</td>
</tr>
<tr>
<td>Over 50</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

The target population of my questionnaire is focusing on Chinese adults, so the age is started from 18 years old. The above chart and table presents the age group of participants. It can be found from the area chart, the age of them is mainly around 18-30 years old. The respondents who are older than 31 years old is relatively small, ever there is no respondent is more than 50 years old. Meanwhile, table 4.4 shows more detailed data. The respondents who are between 18-24 account for the largest proportion of 51.5% with 34 respondents. In second is the 25-30 group, has 29
respondents occupy 43.9% of the total percentage. That is, the younger constitute the majority proportion. Then is the age group of 31-40 and 41-50 with 3.0% and 1.5% respectively.

4.2.3 Education background analysis
Chart 4.5 Education background profile

Table 4.6 Education background profile

<table>
<thead>
<tr>
<th>Education background</th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under high school</td>
<td>3</td>
<td>4.5%</td>
</tr>
<tr>
<td>High school</td>
<td>9</td>
<td>13.6%</td>
</tr>
<tr>
<td>College diploma</td>
<td>29</td>
<td>43.9%</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>7</td>
<td>10.6%</td>
</tr>
<tr>
<td>Master degree</td>
<td>17</td>
<td>25.8%</td>
</tr>
<tr>
<td>Doctor degree or above</td>
<td>1</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
The bar chart clearly shows the education level of 66 respondents. The people who have college diploma own the largest number. On the contrary, the respondents with doctor degree or above have the least number. It is easy to find from table 4.6, the college diploma and master degree hold a majority proportion with 43.9% and 25.8% respectively. The third one is high school has 9 people account for 13.6% of the total number. And then is bachelor degree take up 10.6%, the last two are under high school and doctor degree or above with smaller percentage.

4.2.4 Occupation analysis

Chart 4.7 Occupation profile
Table 4.8 Occupation profile

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>39</td>
<td>59.1%</td>
</tr>
<tr>
<td>Staff of government</td>
<td>9</td>
<td>13.6%</td>
</tr>
<tr>
<td>Staff of enterprises</td>
<td>13</td>
<td>19.7%</td>
</tr>
<tr>
<td>Self-employment people</td>
<td>3</td>
<td>4.5%</td>
</tr>
<tr>
<td>Unemployed people</td>
<td>2</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

This bar chart illustrates the number of participants in different occupations include student, staff of government, staff of enterprise, self-employment people, and unemployed people. Among the five occupations, the number of students is far greater than others has 39 persons occupy 59.1% (see table 4.8) more than half of the total amount. Secondary is the staff of enterprises account for 19.7% with 13 persons. The numbers of last three occupations are all less them 10 people and the proportion of them is 13.6%, 4.5% and 3.0% respectively.

4.3 Customer online purchase habit

In this section, it mainly investigates the information of Chinese customers’ online shopping habits. This can help to understand the general idea of customer online shopping experience, the ways of information access, information needs and so forth.
4.3.1 Online shopping experience

Chart 4.9 Shopping experience

The above chart and table show the percentage of whether customer experienced online shopping or not in China. We can see clearly that there are 52 people have the experience of online purchase and take up 88.1% of the total percentage according to table 4.10. Whereas, there are 7 persons have no any experience of online shopping with the proportion of 11.9%. The total amount of respondents of this question is 59 because there are 8 people skipped this.
The frequency of browsing shopping website

Chart 4.11 Browsing frequency

Chart 4.11 and table 12 illustrate the frequency of Chinese customers browsing online shopping websites. The frequency is divided into more than once a day, once a day, more than once a week, once a week, more than once a month, once a month, and less than once a month.
than once a month. On the whole, participants who browse online shopping websites less than once a week have the largest number with 14 peoples and account for 26.9%. The other 6 variables are almost around the range of 10% to 20% with the number between 5 respondents to 10 respondents. There are only 52 total respondents due to 15 persons skipped to answer this question.

4.3.2 Information types and the ways of shopping websites access

Chart 4.13 Information types
<table>
<thead>
<tr>
<th>Information types</th>
<th>Very important</th>
<th>Important</th>
<th>Neutral</th>
<th>Unimportant</th>
<th>Very unimportant</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>38.2%(21)</td>
<td>36.4%(20)</td>
<td>23.6%(13)</td>
<td>1.8%(1)</td>
<td>0.0%(0)</td>
<td>55</td>
</tr>
<tr>
<td>Products info.</td>
<td>43.6%(24)</td>
<td>45.5%(25)</td>
<td>9.1%(5)</td>
<td>1.8%(1)</td>
<td>0.0%(0)</td>
<td>55</td>
</tr>
<tr>
<td>Vendor info.</td>
<td>24.1%(13)</td>
<td>51.9%(28)</td>
<td>20.4%(11)</td>
<td>3.7%(2)</td>
<td>0.0%(0)</td>
<td>54</td>
</tr>
<tr>
<td>Customer service</td>
<td>27.8%(15)</td>
<td>50.0%(27)</td>
<td>18.5%(10)</td>
<td>3.7%(2)</td>
<td>0.0%(0)</td>
<td>54</td>
</tr>
<tr>
<td>Security</td>
<td>42.6%(23)</td>
<td>31.5%(17)</td>
<td>22.2%(12)</td>
<td>3.7%(2)</td>
<td>0.0%(0)</td>
<td>54</td>
</tr>
</tbody>
</table>

The above chart and table demonstrate the information types of customer usually looking for when they purchase online and also rank the degree with 5 levels: very important, important, neutral, unimportant, and very unimportant. Chart 4.13 clearly presents that people are more concerned about price, products information, and security and privacy, the numbers of responded people are all more than 20 but less than 25, these three are regarded as ‘very important’ aspects. Meanwhile, the respondents are tending to consider products information, vendor information, and customer service information are ‘important’ when they search information for online purchase. Relatively, few respondents think the five types of information are ‘unimportant’, and no respondents select these five types of information are ‘very unimportant’. According to table 4.14, there are 43.6% of respondents think products information is ‘very important’, which is also the largest proportion among other types of information under the label of ‘very important’. Next is the ‘important’ label, more than 50% respondents think vendors’ information is important to themselves. Therefore, we can find that most of people think the five types information are important or very important especially products information (with totally 49
respondents) from the chart and table, and only few or no people think these five types information are unimportant or very unimportant.

The ways of shopping websites access
Chart 4.15 Shopping websites access

<table>
<thead>
<tr>
<th>How do you normally access shopping website?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites advertisement</td>
</tr>
<tr>
<td>TV/newspaper/magazine advertisement</td>
</tr>
<tr>
<td>By search engines</td>
</tr>
<tr>
<td>Introduced by friends or families</td>
</tr>
<tr>
<td>Website links or recommendation</td>
</tr>
</tbody>
</table>

Table 4.16 Shopping websites access

<table>
<thead>
<tr>
<th></th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites advertisement</td>
<td>23</td>
<td>42.6%</td>
</tr>
<tr>
<td>TV/newspaper/magazine</td>
<td>8</td>
<td>14.8%</td>
</tr>
<tr>
<td>By search engines</td>
<td>23</td>
<td>42.6%</td>
</tr>
<tr>
<td>Introduced by friends or</td>
<td>23</td>
<td>42.6%</td>
</tr>
<tr>
<td>families</td>
<td>12</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

This question is about the ways of customer how to access shopping websites. Because of this is a multiple-choice question, the total response count is 89 but
actually is 54 and the total percentage are more than 100% as well. According to the pie chart 4.15 and table 4.16, respondent access shopping website is mainly by search engines, websites advertisement, and introduced by friends or families, the three ways have the same number of respondents and all account for 42.6%. The last two ways are websites links or recommendation and TV/newspaper/magazine advertisement take up 22.2% and 14.8% respectively.

4.3.3 The motivation of customers choose to purchase online

Chart 4.17 the motivations of shop online

Table 4.18 the motivations of shop online

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low price</td>
<td>45.5%(25)</td>
<td>34.5%(19)</td>
<td>16.4%(9)</td>
<td>3.6%(2)</td>
<td>0%(0)</td>
<td>55</td>
</tr>
<tr>
<td>Convenience</td>
<td>36.4%(20)</td>
<td>40%(22)</td>
<td>18.2%(10)</td>
<td>5.5%(3)</td>
<td>0%(0)</td>
<td>55</td>
</tr>
<tr>
<td>Various products</td>
<td>38.2%(21)</td>
<td>45.5%(25)</td>
<td>12.7%(7)</td>
<td>3.6%(2)</td>
<td>0%(0)</td>
<td>55</td>
</tr>
<tr>
<td>Previous</td>
<td>30.9%(17)</td>
<td>45.5%(25)</td>
<td>10.9%(6)</td>
<td>12.7%(7)</td>
<td>0%(0)</td>
<td>55</td>
</tr>
</tbody>
</table>
This chart shows the motivation of customer purchase online. It is obvious that the option ‘low price’, ‘convenience’, ‘various products’ and ‘previous shopping experience’ have higher proportion of label ‘strongly agree’ and ‘agree’ compared with other three options. Among them, most of respondents are strongly agreed ‘low price’ will impact on their purchase, it accounts for 45.5% with 25 out of 55 respondents (see table 4.18). On the contrary, have less respondents strongly agree ‘enjoy shopping process’ is a motivation that prompt them to shop online, it only occupy 18.2% with 17 out of 55 people (see table 4.18). The three option ‘purchase process easy to operate’, ‘enjoy shopping process’ and ‘can interact that respondents select ‘neutral’ take up a largest percentage among with other labels are all more than 36%. Moreover, respondents are less likely to strongly disagree or disagree to all of the above options.
Reasons of customer do not want to shop online and their future attitude

Chart 4.17 Reasons of customer do not want to shop online

Table 4.18 Reasons of customer do not want to shop online

<table>
<thead>
<tr>
<th>Reason</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot see real products</td>
<td>48.9%(23)</td>
<td>34.0%(16)</td>
<td>14.9%(7)</td>
<td>0.0%(0)</td>
<td>2.1%(1)</td>
<td>47</td>
</tr>
<tr>
<td>Poor quality of products</td>
<td>34.8%(16)</td>
<td>39.1%(18)</td>
<td>19.6%(9)</td>
<td>4.3%(2)</td>
<td>2.2%(1)</td>
<td>46</td>
</tr>
<tr>
<td>Transaction process hard to operate</td>
<td>21.3%(10)</td>
<td>44.7%(21)</td>
<td>21.3%(10)</td>
<td>8.5%(4)</td>
<td>4.3%(2)</td>
<td>47</td>
</tr>
<tr>
<td>Privacy and security risk</td>
<td>34.0%(16)</td>
<td>34.0%(16)</td>
<td>21.3%(10)</td>
<td>8.5%(4)</td>
<td>2.1%(1)</td>
<td>47</td>
</tr>
</tbody>
</table>
This question is focusing on the people who have no online shopping experience and aims to find out the reason why they are not willing to purchase online. There are five kinds of reasons and five levels provide for respondents. According to the stacked bar chart 4.17, the reason of ‘cannot see real products’ that respondents labeled ‘strongly agree’ is accounting for the largest proportion compared with other reasons and the number of respondents is 23 (see table 4.18). Other four reasons is all around 10-20 respondents that labeled ‘strongly agree’, it looks quite evenly. Then, turn to look at the ‘agree’ label, the number of each reason that people selected looks quite evenly as well, the number is between 16 respondents and 21 respondents in terms of table 4.18. And a few people select the rest of three labels ‘neither agree nor disagree’, ‘disagree’, and ‘strongly disagree’. Also we can find from the above table, there are 48.9% respondents strongly agree ‘cannot see real products’ is the reason why they do not purchase online. Meanwhile, each have 44.7% of respondents agree they do not choose to purchase online is because of the reason ‘transaction process hard to operate’ and ‘poor post-sale service’. Overall, most of respondents strongly agree or agree these five reasons, only few people select disagree or strongly disagree.
Online shopping attitude of non-experienced customer in future

Chart 4.19 online shopping attitude of non-experienced customer in future

![Pie chart showing online shopping attitude](image)

### Table 4.20 online shopping attitude of non-experienced customer in future

<table>
<thead>
<tr>
<th></th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36</td>
<td>76.6%</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>8.5%</td>
</tr>
<tr>
<td>Not sure</td>
<td>7</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

This question also focuses on the respondents who have no online shopping experience and aim to investigate their attitude of future purchase. It can be found from the above pie chart and table that 76.6% participants are willing to purchase in the future if the existent problems can be improved. However, there are 4 people expressed they will still not purchase online in future and take up 8.5% of the total number of respondents. The rest 14.9% of respondents is that the people who are not sure whether they will purchase online in future after the existing problem to be improved.
4.4 Shopping behavior and attitude of Taobao shoppers

This part mainly investigates the shopping behavior and attitude of customers who have the experience of purchase on taobao.com. It will help to evaluate the reasons why customers choose to purchase on taobao.com and the information risk that they encountered when to purchase.

4.4.1 Customers’ shopping behavior on Taobao

Chart 4.21 shopping experience on Taobao

<table>
<thead>
<tr>
<th>Have you ever purchased anything on Taobao before?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Response count</td>
</tr>
<tr>
<td>Response percentage</td>
</tr>
</tbody>
</table>

According to this pie chart 4.21 and table 4.22, there are 66% of respondents having the shopping experience on taobao.com and 34% of respondents have never bought anything on Taobao. The total amount of this question is 47 with 31 experienced respondents and 16 non-experienced respondents.
The types of products and service when purchase on taobao.com

Chart 4.23 the types of products and service

Table 4.24 the types of products and service

<table>
<thead>
<tr>
<th></th>
<th>Very likely</th>
<th>Likely</th>
<th>Neutral</th>
<th>Unlikely</th>
<th>Very unlikely</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>21.6%(8)</td>
<td>37.8%(14)</td>
<td>18.9%(7)</td>
<td>2.7%(1)</td>
<td>18.9%(7)</td>
<td>37</td>
</tr>
<tr>
<td>Books</td>
<td>21.6%(8)</td>
<td>24.3%(9)</td>
<td>32.4%(12)</td>
<td>16.2%(6)</td>
<td>5.4%(2)</td>
<td>37</td>
</tr>
<tr>
<td>Electrical equipments</td>
<td>27.0%(10)</td>
<td>24.3%(9)</td>
<td>16.2%(6)</td>
<td>21.6%(8)</td>
<td>10.8%(4)</td>
<td>37</td>
</tr>
<tr>
<td>Clothing</td>
<td>55.6%(20)</td>
<td>27.8%(10)</td>
<td>5.6%(2)</td>
<td>5.6%(2)</td>
<td>5.6%(2)</td>
<td>36</td>
</tr>
<tr>
<td>Beauty products</td>
<td>40.5%(15)</td>
<td>32.4%(12)</td>
<td>21.6%(8)</td>
<td>2.7%(1)</td>
<td>2.7%(1)</td>
<td>37</td>
</tr>
<tr>
<td>Accessories</td>
<td>32.4%(11)</td>
<td>20.6%(7)</td>
<td>35.3%(12)</td>
<td>8.8%(3)</td>
<td>2.9%(1)</td>
<td>34</td>
</tr>
<tr>
<td>Furniture</td>
<td>16.7%(6)</td>
<td>8.3%(3)</td>
<td>33.3%(12)</td>
<td>25.0%(9)</td>
<td>16.7%(6)</td>
<td>36</td>
</tr>
<tr>
<td>Flowers/hotel/cards</td>
<td>25.7%(9)</td>
<td>25.7%(9)</td>
<td>34.3%(12)</td>
<td>8.6%(3)</td>
<td>5.7%(2)</td>
<td>35</td>
</tr>
<tr>
<td>Products</td>
<td>Very Likely</td>
<td>Likely</td>
<td>Neutral</td>
<td>Unlikely</td>
<td>Very Unlikely</td>
<td>Total</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------</td>
<td>----------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>Tickets/hotel booking</td>
<td>28.9%</td>
<td>18.4%</td>
<td>28.9%</td>
<td>15.8%</td>
<td>7.9%</td>
<td>38</td>
</tr>
<tr>
<td>Second hand goods</td>
<td>16.2%</td>
<td>18.9%</td>
<td>21.6%</td>
<td>18.9%</td>
<td>24.3%</td>
<td>37</td>
</tr>
</tbody>
</table>

Question 13 aims to investigate the types of products and service that customer usually purchase on Taobao. There are displayed ten kinds of products and service for consumers with five levels to evaluate respondents’ purchase habit. Chart 4.23 presents there are more respondents ‘very likely’ to purchase clothing with 20 persons, and then is beauty products with 15 persons, the next is accessories with 15 persons. About the ‘likely’ label, respondents more concern on food, clothing and beauty products which are all more than 27% of the total proportion. Correspondingly, few respondents (around 1 to 3) select food, clothing, and beauty products as ‘unlikely’ and rare respondents choose beauty products and accessories (only 1 person of each) as ‘very unlikely’. According to table 4.24, the number of respondents choose clothing as ‘very likely’ and ‘likely’ are almost 30 people, and the number of respondents select beauty products is around 27 people while has 22 respondents choose food as ‘very likely’ and ‘likely’. Therefore, the top three of products and service that respondents usually purchase on taobao.com are clothing, beauty products, and food. In addition, the three kinds of products that have the largest proportion of ‘neutral’ are accessories, books, and flowers/hotel/cards respectively.
Shopping frequency

Chart 4.25 the frequency of shopping on Taobao

![Bar chart showing shopping frequency on Taobao]

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>11</td>
<td>28.9%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>12</td>
<td>31.6%</td>
</tr>
<tr>
<td>Rarely</td>
<td>4</td>
<td>10.5%</td>
</tr>
<tr>
<td>Depend on needs</td>
<td>11</td>
<td>28.9%</td>
</tr>
</tbody>
</table>

Table 4.26 the frequency of shopping on Taobao

The chart 4.25 and table 4.26 display the shopping frequency of Taobao shoppers’. The degree is divided into four levels includes frequency, sometimes, rarely, and depend on needs. Noticeably, respondents are tending to choose ‘sometimes’, ‘frequency’, and ‘depend on needs’. The percentages of these three levels are all around 30%. Respondents are less likely to choose ‘rarely’ only with the proportion of 10.5%.
Maximum spending

Chart 4.27 maximum spending on Taobao at one time

Chart 4.27 shows the situation of customer maximum spending on Taobao at one time which is based on RMB (1GBP ≈ 10.55RMB). The option is divided into five intervals involve less than 100, 101-500, 501-1000, 1001-2000, 2001-3000, more than 3001. Among the five intervals, respondents select 101-500 account for the largest proportion with 42.1%, and next is the range of ‘less than 100’, take up 23.7% of the total amount. However, no one spend more than 3001 on Taobao at one time. Therefore, Taobao customers tend to small consumption.
4.4.2 Information factors that influence customers’ decision making

Chart 4.28 Information factors

How do the following information factors affect your decision to purchase on Taobao? Please tick only one for each variable.

Table 4.29 Information factors

<table>
<thead>
<tr>
<th>Information factor</th>
<th>Absolutely important</th>
<th>Important</th>
<th>Neutral</th>
<th>Unimportant</th>
<th>Absolutely unimportant</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low price</td>
<td>35.9%(14)</td>
<td>43.6%(17)</td>
<td>15.4%(6)</td>
<td>5.1%(6)</td>
<td>0.0%(0)</td>
<td>39</td>
</tr>
<tr>
<td>The range of products</td>
<td>23.7%(19)</td>
<td>60.5%(23)</td>
<td>15.8%(6)</td>
<td>15.8%(6)</td>
<td>0.0%(0)</td>
<td>38</td>
</tr>
<tr>
<td>Products quality</td>
<td>52.8%(19)</td>
<td>25.0%(9)</td>
<td>19.4%(7)</td>
<td>19.4%(7)</td>
<td>0.0%(0)</td>
<td>36</td>
</tr>
<tr>
<td>The authenticity of products</td>
<td>37.8%(14)</td>
<td>43.2%(16)</td>
<td>18.9%(7)</td>
<td>18.9%(7)</td>
<td>0.0%(0)</td>
<td>37</td>
</tr>
</tbody>
</table>
Question 16 is about information factors that may influence customer purchase decision on Taobao aims to estimate the impact degree of each factor for customers’ shopping behavior. As can be seen from chart 4.28, the percentage of blue and red bar is higher than the other three bars of each factor. There are respectively more than half of respondents consider ‘the range of products’ and ‘purchase experience’ are absolutely important to them. And also have nearly 50% of people respectively think ‘product quality’ and ‘security’ are important. Relatively, only few even rare people think all these factors are unimportant and absolutely unimportant to their purchase decisions. From the table 4.29, we can find the total percentage that respondents think the factor ‘the range of products’ is absolutely important and important occupy almost 84%. And the next three are ‘the authenticity of products’, ‘the range of products’, and ‘security’ with the percentage of nearly 80% respectively. Overall, the above four factors are outstanding important to respondents, but the other factors such as ‘the reputation of seller’, ‘delivery speed’ are less important.
Website design

Chart 4.30 the satisfaction of website design

This question is focusing on the satisfaction of Taobao’s website design. The option of website design includes ‘easy to search needed products’, ‘the safety of payment system’, ‘the speed of information undated’, and ‘the convenience of payment system’. Chart 4.30 presents that there are 42.1% of respondents very satisfy with the option of ‘easy to search needed products’. Compared with the other three options, it occupies the largest proportion of nearly 97% with ‘very satisfaction’ and ‘satisfaction’ labels. While, there are almost 84% respondents very satisfy and satisfy with the option of ‘the safety of payment system’. And no respondent dissatisfies and very dissatisfies with these two options. About the last two potions ‘the speed of information undated and ‘the convenience of payment system’, relatively have 2.7% respondents dissatisfy with them on taobao.com.
4.4.3 Information risks

The experience of encountering information risks

Chart 4.31 the information risk when shopping on Taobao

<table>
<thead>
<tr>
<th>Question 17 aims to investigate the situation that whether respondents have experienced information risk when purchase on taobao.com. It is obvious that we can see from above chart 4.22 and table 4.23, there are 59.5% of respondents (22 out of 34 people) have not experienced the information risk when they shopping on Taobao. The rest of 12 respondents have experienced the information risk on taobao.com with 40.5% of the total numbers.</th>
<th>Response count</th>
<th>Response percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>59.5%</td>
<td>22</td>
</tr>
<tr>
<td>Yes</td>
<td>40.5%</td>
<td>12</td>
</tr>
</tbody>
</table>
The types of information risk

Chart 4.33 information risks

This chart displays the impact of information risks to customers’ online purchase decision. We can see clearly that respondents are very likely to be affected by the risk ‘privacy leak’, which take up the largest proportion (44.7%) among all of the risks with the ‘very likely’ label. About the ‘likely’ label, the risk ‘fraudulent merchant behavior’ occupies most (occupies 43.2%) compared with other three risks. Also, we can find from the chart 4.33, the risk of ‘fraudulent merchant behavior’ that people think ‘likely’ and ‘very likely’ have a higher percentage with totally 78.3%. The other three risks have similar percentages with the label of ‘very likely’ and ‘likely’. In addition, only few respondents think these four risks are ‘unlikely’ and ‘very unlikely’ affect their purchase decisions.
Future purchase attitude to taobao.com

Chart 4.34 whether customers still purchase on taobao.com in future

This chart presents the attitude whether customers will still purchase on taobao.com in future under the current shopping environment. It is clearly that most of respondents (with the percentage of 76.3%) show they would continue to purchase on taobao.com in future. However, there are 7.8% respondents indicate that they will not purchase on Taobao any longer. An also have 15.8% respondents maintain a neutral attitude to it.

4.5 Summary

This chapter has presented and analyzed the collected date from questionnaire. These data was divided into three parts involve demographic section, customer online shopping habit section, and Taobao shoppers’ shopping behavior and attitude section. Through these parts, 20 questions in questionnaire were all implemented in detail so as to provide evidence for research questions. And in next chapter, the relationship between findings and literature review will be discussed.
Chapter 5

Discussion

5.1 Introduction

In this chapter, it mainly indicates the results from the collected data and discusses the quantitative findings compared with previous literatures. First of all, the research validity and reliability is discussed in brief. Then is the results discussion from the questionnaire which consists of three sections, includes demographic analysis, the general information of customer online shopping behavior in China, and customer online purchase behavior and attitude on taobao.com. Finally is a short summary of this chapter.

5.2 The validity and reliability of data

Reliability and validity is a central question when it comes to research. Actually, failure to ensure the validity or reliability of the research findings may cause the research encounter problems even to be rejected as useless (Singh, 2007). Although these two terms seen to be like synonyms, they have considerable different meanings on the assessment of measures of perspectives. In quantitative research, reliability is considered as consistency or repeatability of the measurement. In other words, consistency is related to the questionnaire whether to be defined clearly and appropriately so that makes respondents understand well. While repeatability means if researchers can gain the exactly same result when repeat the questionnaire survey (Golafshani, 2003). The draft of my questionnaire has been checked by my dissertation supervisor Mr. Peter Holdridge who is a learning technologist of Information School at Sheffield University before published. Also, a pilot study was implemented by several of my friends in order to ensure respondents can exactly understand each of my questions. Relatively, Joppe (2000) pointed out validity refers to whether the research really measures what is planned to test or how actually the
research findings are. Researchers usually consider validity through asking various questions then to look for the answers from respondents. The designed questions in my questionnaire are based on the research objectives.

5.3 Discussion the results

The results from questionnaire are composed of three sections: demographic profile, the online shopping habit of Chinese customers, customers shopping behavior and attitude on taobao.com.

5.3.1 Demographic analysis

The demographic findings include four aspects: gender, age, education background and occupation. These four are the foundational and important elements that link with other questions to indicate the results compared with previous literatures. As presents from table 4.35 (see appendix table 4.35), there are 81.2% male (23 out of 52 respondents) and 93.5% female (29 out of 52 respondents) have experienced online shopping. That is, the number of female online shoppers is slightly more than male. According to the Chinese Online shopping Market Research Report (CNNIC, 2011), the male proportion of online shoppers is higher than female with 54.5% and 45.5% respectively. CNNIC (2011) also points out that male group have become the main force of online shoppers, which is related with male population possess a larger proportion among Internet users. But in general, the distribution of male and female can usually keep a balance. My finding from questionnaire is a little different with the existent statement, maybe due to the limitation of sample size.

The age group of respondents of the questionnaire is mainly focus on 18-30 years old and totally takes up 95.4% (see table 4.4). Majority of respondents is the students and have college diploma education background, account for 59.1% and 43.9% respectively (see table 4.8 and table 4.6) compared with other occupations and other
education background. Similarly, the age group of online shoppers is mainly around 18-24 and 25-30 with 34% and 31.9% respectively in 2010 (CNNIC, 2011). And the education background of online shoppers usually based on college diploma, bachelor degree and above. While the number of enterprise staff and students occupy a large proportion (CNNIC, 2011). Therefore, the findings about respondents’ age, education background and occupation are similar with the survey of 2010 Chinese Online shopping Market Research Report.

5.3.2 Customer online shopping habit in China

This part presents the results of customer online shopping habits, such as the information types that they usually looking for, the ways that they normally access shopping website. As shows from chart 4.13, there are 42.6% of respondents think ‘security and privacy information’ is a very important factor when search for information, and secondary is the ‘price’ that respondents think is very important with 38.2% of total amount. That is, customers are more concerned on products price and the information security and personal privacy when purchase online. As Kim (2008) points out that customer would like to look for various information especially the information security and privacy in order to reduce the uncertainty before purchase.

About the ways of access shopping websites, chart 4.15 and table 4.16 indicate that respondents are more likely to access shopping websites under the influence of websites advertisement, search engines, and introduced by friends or families. Perterson and Merino (2003) expressed that ‘sellers’ is the most important information source that spur customer to access shopping websites, including advertising, staff’s oral introduction, products package, product introduction manual and other information which are provided by sellers. A good advertising usually can attract more customers to purchase, the above finding is consistent with and Perterson & Merino’s point that ‘website advertising’ is a kind of very important information
source. However, Perterson and Merino also stated that friends or families recommendation only can help to check and verify, the importance is inferior to ‘website advertising’. This point is different with the findings about ‘website advertising’ and ‘friends or families recommendation’ are equally important. Furthermore, according to the 28\textsuperscript{th} Statistical Report on the Internet Development in China (CNNIC, 2011), the size of the Internet users search for information through search engines and mass media has a rapid growth. Therefore, customers may also through these tools search for information to access shopping websites.

As for the motivation of customer shopping online, the chart 4.17 and the table 4.18 show that most of respondents are strongly agree or agree the option ‘low price’, ‘convenience’, ‘various products’ ,and ‘pervious shopping experience’ as the motivation of purchase online and the proportion are all more than 75% with the total amount. As stated by To et al (2007) in section 2.2.1, convenience is a significant factor that promote customers to shop online due to they can purchase online anywhere and anytime, the transaction system is running 24 hours a day, 365 days a year. Meanwhile, ‘low price’ is another advantage of web-based transaction in terms of Park’s statement (2003). Because of online store can save lots of cost such as rent compared with physical store. Noticeably, customers are more likely to purchase the cheaper items with the same quality. There is no doubt that the web-based store involves rich range of products and customers can purchase the desired products easier. As stated by the previous shopping experience of customers also mentioned by Monsuwe et al (2004) in section 2.2.2.2, a good shopping experience will establish the trust with customers to some extent, otherwise the customers are less likely to purchase again. Therefore, the findings of question 9 are similar with points from literature review about shopping motivation.

5.3.3 Shopping behavior and attitude of Taobao shoppers

5.3.3.1 Shopping behavior on taobao.com
This part concentrates on the people who have experienced shopping on taobao.com. With 66% respondents (see chart 4.21) have purchased items on taobao.com and they are very likely to purchase clothing (accounts for 55.6%), beauty products (takes up 40.5%), and then are food and electronic equipments (see table 4.24). Similarly, the survey from CNNIC (2011) illustrates that the products that to be purchased online tends to become daily product, such as clothing, household equipment is becoming more popular, the volume of sales are continually increased. The best-selling products are clothing and shoes in online shopping market in 2010 and the purchase proportion is 70.1%. The second largest commodity group is digital products with the proportion of 31.6%. Therefore, the research findings are similar with statement from CNNIC (2011).

With regard to the purchase frequency on taobao.com, most of respondents are chose ‘sometimes’ occupy 31.6%, while ‘frequency’ and ‘depend on needs’ have a close ratio (see chart 4.25). As shows from table 4.36 (see Appendix 2), the more times that respondents browse taobao.com, the more possible they will purchase. Moreover, the maximum consumption that respondents spend on taobao.com at one time is usually around 100-500 RMB in terms of the data from chart 4.27, this implies customers tend to buy relative cheap products on Taobao.

5.3.3.2 Information factors

About the information factors that affect customers’ purchase behavior, chart 4.28 provide a clear presentation. The factors ‘lower price’, ‘the range of products’, ‘the authenticity of products’ and ‘security’ are more likely to impact on consumers. In literature review 2.4.2, Hsu et al (2006) illustrate that price is an outstanding factor when customers choose to purchase online due to the same products can be purchased in a quite lower price compared with the physical stores. Also, Lin et al (2008) point out that a security payment system can greatly affect the establishment of trust between customers and retailers, which can also effectively avoid online fraud.
behavior. As stated by Hou (2007), sellers’ reputation is also an important factor. A good and honest seller will transfer the exact products information to customers. Otherwise the products quality or the relevant customer service may be difficult to guarantee after payment. That is, these three factors can be greatly impact on customers’ decision-making in terms of the existent literature. And my findings of this question are almost same with it, the factor ‘seller reputation’ also accounts for a higher proportion among these factors which can be found in chart 4.28 as well.

As shown by Chart 4.30, majority of respondents are satisfied with the website design of taobao.com especially the safety of payment system with the proportion of 56.8%. Other aspects such as ‘easy to search needed products’, ‘the speed of information updated’, and ‘the convenience of payment system’ are all account for a close percentage. Indeed, Lin et at (2008) claimed in literature review 2.6.2 that taobao.com provides an online virtual transaction platform, Alipay as a third party payment tool is applied in the transaction processes. After the customers make payment, their money do not directly transfer into retailers’ account but into a third party Alipay, then customer confirm the payment information after received the ordered items, until the money enter into sellers’ account. On the whole, this kind of payment tool is quite safety can effectively avoid online fraud behavior and customers are more likely to trust it. However, it is not convenience enough to users when make a payment compared with other payment system such as Amazon, customer can directly pay money to seller then deliver the goods.

5.3.3.3 Information risks

According to the result of chart 4.31, most of respondents have not experienced risk when shopping on taobao.com. While the information risks they are more concerned involve ‘false advertising’, ‘privacy leak’, and ‘system security’. It is claimed by Udo (2001) that privacy and security concerns can be regarded as major barriers for electronic commerce. Wang and Lee (1998) also point out that someone may spread the information of internet consumers without their permission or admission. Such
information invasions involve junk mail, a mass of direct mail, as well as junk Internet push channels. This phenomenon is named ‘unwanted solicitation’. In terms of chart 4.17 from question 10, the barriers that prevent respondents purchasing online mainly because they cannot see the real products, privacy and security risk, and transaction process hard to operate. In addition, CNNIC (2011) reported that there are 18.5% of online shoppers are unsatisfied with the shopping experience in the past six months and the reasons are focusing on products quality and distribution sectors. Among them, the reason of the inconsistent of actual products and products image occupy a largest proportion up to 35.7%, the followed one is because the fake and poor quality goods with 26.7%, and then is due to the long time of products delivery cause customers’ dissatisfaction. Therefore, the risks of unauthentic products description and information privacy and security are greatly impact on online purchase decision. My findings are similar with the existent literature.

After discussing the risks of shopping on Taobao, the attitude of customers’ future purchases need to be evaluated. According to chart 4.19 (question 11), most of respondents select ‘yes’ option means they are willing to purchase online in the future after improved the existent problems. Meanwhile, chart 4.34 demonstrates there are 76.3% respondents will still purchase on taobao.com despite there are some risks. Therefore, the Internet users are instinct with confidence to online shopping whatever taobao.com or other shopping websites in China.

5.4 Summary

In this chapter, the relationship between the findings from questionnaire samples and the points in literature review around customer shopping habits, Taobao shoppers’ shopping attitude and behavior information has been discussed in order to achieve research objectives. And all of the presented data include the relationship between two questions are automatically statistics by Excel formula, thus the results could be more reliable.
Chapter 6

Conclusion

6.1 Introduction

This final chapter is going to discuss the reflection of the whole processes of this research, and then to illustrate the findings of this research which has been mentioned in last chapter. What’s more, this chapter will conduct the limitation of this study and finally, some recommendations for further research will be expressed.

6.2 Reflection of the whole study

The processes of the whole study are composed of six chapters: Introduction, Literature Review, Methodology, Data Presentation and Analysis, Discussion, and Conclusion. Chapter one mainly presents a introduction of this research involves the background information that related with the research topic, research aims and objectives. Then through reviewing and synthesizing the previous literatures to give integrative understanding about customer online shopping motivations, influence factors, the ways of customer how to access shopping websites and information risks when purchase online was discussed in Chapter two. Chapter three concerns on the methodology applied in this research, which refers to the method of investigation, the design and analysis of questionnaire, and data collection. In chapter four, it presents and analyses the findings from the collected data through various graphs and tables include demographic section, Chinese customer online shopping habits section, and Taobao shoppers’ purchase behavior and attitude section. In chapter five, it discusses the research findings compared with the previous literatures. Also, it states the reliability and validity of data. Chapter six summarizes the research findings and indicates the limitation of this study, as well as the recommendation of the future research.
6.3 Research findings

This research includes primary research and secondly research. The former focuses on questionnaire to collect data and analyze the result. The latter is based on the previous literatures.

According to the result of primary research through questionnaire, most of respondents are Chinese young generation with the age group of 18-30 years old and a majority of them are students. Indeed, there are totally 67 samples but only a small part is completely finished by respondents.

The findings of customer online shopping motivation have been discussed in section 5.3.2, which is similar with the previous literature in chapter 2. Customers choose to shop online mainly due to the low price, various products and convenience. These three are also can be as the outstanding advantages of web-based store compared with physical store.

As for the information search behavior of e-shoppers and the ways of online websites access, section 2.3 gives a detailed discussion in terms of the previous literatures. While according to the findings, customers consider products information and security and privacy information are very important when shopping online. And the ways of shopping website access are usually depending on website advertisement, search engines and friends or families introduce.

About the information factors that influence customers’ shopping behavior have been mentioned in literature review section 2.4, and the influence factors of Taobao shoppers are discussed in section 2.6.2 as well. In terms of the findings from questionnaire in Chapter four, most of respondents show they are greatly affected by the factors of ‘products quality’, ‘the reputation of seller’, and ‘information security’, which occupy the top three largest proportion with the ‘absolutely important’ label.
Meanwhile, information risks have been showed in literature review 2.5 involve information asymmetry and information security risk. In terms of the findings in section 4.33, the risks that Taobao shoppers are more likely to encounter are ‘false advertising’, ‘information leak’, and ‘system security’ and also, the barriers of shop on taobao.com is mentioned in literature review 2.6.3.

6.4 Limitations of the survey method

There are some limitations need to be explained in this research. First of all, the size of samples is insufficient only 55 out of 67 is valid because my target group is focus on Chinese adult who have online shopping experience especially the experience of shopping on taobao.com. Among the 55 respondents, only a part of people totally complete all of the questions in questionnaire and plenty of them skipped questions. Therefore, the really valid data only take up a small proportion. Certainly, the biggest reason is because of time limitation, I have no enough time to collect otherwise the sample size will be larger. Secondly, most of respondents are my friends because snowballing as a central method to spread the number of questionnaire. Therefore, most of them are students and with the age group of 18-30, people who have the similar age and occupation may have similar perspective, thus these collected data may cause the inaccurate result about online shopping and cannot entirely represent the view of all populations. Furthermore, I only designed the English version of this questionnaire but not involve Chinese version, it reduced my sample size to some extent due to the target population. My target group is focus on Chinese adults at home or abroad, there is no doubt that not all of domestic Chinese people are good at English also includes my friends and the correct meanings of questions may be difficult to understand. Therefore, it is very necessary to design a Chinese version if the questionnaire is focusing on Chinese people and can be helpful to collect more samples to researchers.
6.5 Recommendations for further study

Although there are some limitations of this research, several available results that related to research objectives have been discovered as well. In order to implement the study better, three possible recommendations about online shopping have been noticed as follows:

To begin with, as for the limitation of sample size, the number of participants needs to be increased and the scope of population should be enlarged in further research so as to avoid the unbalanced distribution of respondents, which can also enhance the validity and reliability of data. Besides, the results will be more accurate and valid if quantitative approach and qualitative approach to be applied together in one research in terms of the statement from Kothari (2004). Therefore, these two approaches can be used together in further research.

Secondary, the motivation that customers prefer to shop online have been discussed in this research. The further research can concern on different products for different customer motivation. There is no doubt that the attribute and characteristics of products will influence purchases motivation. For example, customer may more focus on the quality and customer service when purchase electronic equipment, and to clothing they may more concern on the price.

Thirdly, there are many information risks exist in Chinese online shopping environment, which can greatly impact on customers’ purchase decision then result in the distrust to online shopping, thus it is necessary to study the solutions of current risks in Chinese online shopping market. Such as improve the customer service, establish the security transaction system, and avoid selling the fake products. The effective solutions enable customers to increase their purchase online and e-retailers can enlarge their online business as well.

**Word count: 15,609**
Bibliography


Contantinides, E. (2004). Influence the online consumer’s behavior: the Web


Appendix 1: Research Questionnaire

Dear participant,

I am a postgraduate student studying MSC Information Management at the iSchool at Sheffield University. This questionnaire is designed for collecting the data about how network information might influence customer’s online shopping behavior in China based on a case study of taobao.com. You only need 5-10 minutes to complete it, and all your information will be confidential and anonymous. There is no personal sensitive question in this survey and no third part will access to your files.

Thank you for your precious time to help me with my research. If you have any questions about it, please contact me with following email address: lip10jl@sheffield.ac.uk.

Questionnaire

Part 1: Basic information

1. Your gender
   □ Male
   □ Female

2. Your age:
   □ 18-24
   □ 25-30
   □ 31-40
   □ 41-50
   □ Over 50

3. Your education background:
   □ Under high school
□ High school
□ College diploma
□ Bachelor degree
□ Master degree
□ Doctor degree or above

4. Your occupation:
□ Student
□ Staff of governments (e.g. teachers, doctors, lawyers)
□ Staff of enterprises (e.g. bankers, managers)
□ Self-employment people (e.g. freelancer)
□ Unemployed people

Part 2: Customer online shopping habit

5. Do you have any experience of online shopping?
□ Yes (please turn to question 6)
□ No (if no, please turn to question 10)

6. What is the frequency that you browse shopping websites?
□ More than once a day
□ Once a day
□ More than once a week
□ Once a week
□ More than once a month
□ Once a month
□ Less than once a month

7. What kinds of information do you usually look for when shopping online? Please rate in terms of your view. (5=very important, 4=important, 3=neutral, 2=unimportant, 1=very important)
Price

Products information (e.g. function, quality)

Vendor information (e.g. reputation)

Customer service information

Security and privacy information

Others (please specify——— )

8. How do you normally access the shopping websites?

☐ Websites advertisement

☐ TV/newspaper/magazine advertisement

☐ By search engines

☐ Introduced by friends or families

☐ Websites links or recommendation

☐ Others (please specify ———— )

9. Why do you choose to purchase online? Please tick one for each option (after this, please turn to question 12). (5=strongly agree, 4=agree, 3= neither agree nor disagree, 2=disagree, 1=strongly disagree)

☐ Low price

☐ Convenience

☐ Various products

☐ Previous shopping experience

☐ Can interact with others

☐ Enjoy shopping process

☐ Purchase processes easy to operate

☐ Others (please specify——— )

10. To what extent do the following reasons make you not want to purchase online?

Please tick one for each option. (5=strongly agree, 4=agree, 3= neither agree nor
disagree, 2=disagree, 1=strongly disagree)

Cannot see real products 5 4 3 2 1
Poor quality of products 5 4 3 2 1
Transaction process hard to operate 5 4 3 2 1
Private and security risk 5 4 3 2 1
Poor post-sale service 5 4 3 2 1
Additional cost (e.g. postage) 5 4 3 2 1
Uncertain delivery time 5 4 3 2 1

11. Will you try to purchase online if these problems improved?

☐ Yes
☐ No
☐ Not sure

Part 3: Shopping behavior and attitude of Taobao shoppers

12. Have you ever purchased anything on Taobao before?

☐ Yes (please move to question 13)
☐ No (if no, please specify which website you like to purchase —— and you have finished this survey)

13. What products and service do you usually purchase on Taobao? Please tick one of each option as follows. (5=very likely, 4=likely, 3=neutral, 2=unlikely, 1=very unlikely)

Food 5 4 3 2 1
Books 5 4 3 2 1
Electrical equipments 5 4 3 2 1
Clothing 5 4 3 2 1
14. How often do you purchase on Taobao?
   □ Frequently
   □ Sometimes
   □ Rarely
   □ Depend on needs

15. What is your maximum spending on Taobao at one time (RMB)?
   □ Less than 100
   □ 101-500
   □ 501-1000
   □ 1001-2000
   □ 2001-3000
   □ More than 3001

16. How do the following information factors affect your decision to purchase on Taobao? Please tick only one for each variable. (5=Absolutely important, 4=Important, 3=Neutral, 2=Unimportant, 1=Absolutely unimportant)

   Low Price                                  5  4  3  2  1
   The range of products                      5  4  3  2  1
   Products quality                           5  4  3  2  1
   The authenticity of products               5  4  3  2  1
The reputation of seller  5  4  3  2  1
Security  5  4  3  2  1
Information privacy  5  4  3  2  1
Delivery speed  5  4  3  2  1
Post-purchase service  5  4  3  2  1
Purchase experience  5  4  3  2  1
Others (please specify )  5  4  3  2  1

17. Are you satisfied with the website design of Taobao’s? please tick one of each option.(5=Very satisfaction, 4=Satisfaction , 3=Neutral, 2=Satisfaction, 1=dissatisfaction)

Easy to search needed products  5  4  3  2  1
The safety of payment system  5  4  3  2  1
The speed of information undated  5  4  3  2  1
The convenience of payment system  5  4  3  2  1
Others (please specify )  5  4  3  2  1

18. Have you ever experienced what you consider to be a ‘risk’ on Taobao?

□ Yes (if yes, please specify ________ )
□ No

19. To what extent, the following risks affected your purchasing decision? Please tick only one option for each variable. (5=very likely, 4=likely, 3=natural, 2=unlikely,1=very unlikely)

False advertising  5  4  3  2  1
Fraudulent merchant behavior  5  4  3  2  1
(e.g. inaccurate products information)
Privacy leak (e.g. personal purchase information)  5  4  3  2  1
System security (e.g. credit card fault)          5  4  3  2  1
Others (please specify ————)                    5  4  3  2  1

20. Considering the previous question would you still purchase on Taobao later?
   □ Yes
   □ No
   □ Not sure
Appendix 2: Tables

Table 4.35 gender and online shopping experience

<table>
<thead>
<tr>
<th>Experience</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Response totals</th>
</tr>
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<tr>
<td>Yes</td>
<td>Male</td>
<td>81.2% (23)</td>
<td>93.5%(29)</td>
<td>88.1%(52)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>17.9%(5)</td>
<td>6.5%(2)</td>
<td>11.9%(7)</td>
</tr>
</tbody>
</table>

Table 4.36 the frequency of customer browsing shopping website and purchase on taobao.com

<table>
<thead>
<tr>
<th>Frequency</th>
<th>More than once a day</th>
<th>Once a day</th>
<th>More than once a week</th>
<th>Once a week</th>
<th>More than once a month</th>
<th>Once a month</th>
<th>Less than once a month</th>
<th>Response totals</th>
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</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>66.7%(2)</td>
<td>60.0%(3)</td>
<td>66.7%(4)</td>
<td>25.0%(1)</td>
<td>16.7%(1)</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>73.6%(11)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>0.0%(0)</td>
<td>20.0%(1)</td>
<td>16.7%(1)</td>
<td>75.0%(3)</td>
<td>50.0%(3)</td>
<td>67.7%(2)</td>
<td>18.2%(2)</td>
<td>56%(12)</td>
</tr>
<tr>
<td>Rarely</td>
<td>33.3%(1)</td>
<td>20.0%(1)</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
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<td>22.6%(4)</td>
</tr>
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<td>0.0%(0)</td>
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