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Customer experience with online shopping

What are the unique experiences customers seek from online shopping?

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Abstract

Over the last decade, there has been a great change in consumers' shopping behavior along with technological change. Online shopping is the use of computer technology for better shopping performance. Retailers are busy in studying consumers' behavior to see their attitudes toward online shopping and to meet the demand of online shoppers. Due to my interest in online business, I have also decided to study about customers' attitudes toward online shopping and specifically regarding factors that influence their attitudes.

The primary goal of this research is to analyze factors that affect customers' online shopping experience, factors that attract customers from traditional physical shops to online stores. The population selected for this study is mostly NHH students due to limited resources and time. I pursued the collection of quantitative data by using online questionnaire strategy, and the final sample size that is used for this research is 74.

The results of the research reveal that among the main three factors selected for this research, which are convenience, interactivity and perceived risk, the most attractive and influencing factors for online shoppers are perceived ease of use, personalization, responsiveness and privacy risk. Results have also shown that WOM and control are of important concern among online shoppers, although they are not main factors that attract customers from using traditional physical shops. This study is expected to not only help online retailers to create successful strategies for online shoppers but also provide a basis for future studies in the felid of online shopping.

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1. Introduction

The development of technologies has changed the way people behave. With the change of people's behavior, business practices have also changed to adapt to the emerging trend. One example is the arrival of the online shopping era. Internet has become an important part of our life. It allows us to do many things just sitting in front of our desks and simply click our way through life. It brings so much fun and convenience to our life and thus it has become really hard to live without computers or the Internet. Along with the improvement of Internet technologies, our traditional behavior is changing dramatically.

Nowadays, people can engage in shopping almost at anytime they want and from anywhere internet is available. With increasing number of online stores, people are facing more choices of products or retailers at the same time, and it makes decision making much more effective and productive. They can gather and compare lots of information in a short amount of time without being bothered by sales persons as compared to the physical shops. People can take as much time as possible to reach their final decisions of purchase. This makes traditional physical shops less attractive for people to visit.

The online store is more than just a shopping platform. It is also a communication channel, where people can interact with each other frequently and share their ideas and experience. This is for the most part what differentiates online stores from physical shops. In physical shops, customers will typically only talk with sales people in the shop, rarely with other customers. Conversely, online stores allow customers to communicate with other customers who they don't even know. Sometimes customers would ask for advice from others, or sometimes they would look at what others say about certain products and then make their decisions according to that information. This kind of communication among customers is more active on online stores than in traditional physical shops. This is because people don't need to reveal themselves on the internet while interacting with other people, and they don't need to worry about how others will react to them.

However, online stores are not totally outperforming traditional physical shops. Online shopping brings some risks to customers. In the physical shops, people can get what they want instantly after payment, but with the online platform, people have to wait until the product is delivered, and it might possible that what is delivered is not what they were actually expecting. Another risk followed by using online stores is the exposure of personal information. In order to use online stores, people usually need to provide certain level of personal information to get registered and entitled for payment, and this information might be used for other inappropriate purposes. In addition, online shopping is done by using credit card or bank card, which induces risk of losing money, and this can bring even worse consequences.

Why are people still willing to use online stores despite all those potential risks? What are the factors that attract them to online stores, in other words, what are the factors that affect customers' experience with online shopping? The main goal of this paper is to find out the answers to these questions, and to further provide managerial implications for those who are interested in online business.

Past studies of Thomas and Veloutsou (2011) or Rose et al. (2011) have been focusing on the impact of trust on online experience, and not many studies are available for understanding what factors drive trust and further affect online experience. This understanding is important for marketers due to the fierce competitive environment of today’s online business. Successful online business largely depends on the firm’s ability to exploit the benefits of online shopping by addressing customers' needs and expectations of online services and products, meanwhile holding the line with their competitors in terms of the trend of technology innovation. In particular, understanding the drivers of online experience will lead to better decision-making with respect to the company’s strategies for its brand differentiation.

Several researchers (such as Ling et al. 2011, Ganguly et al. 2009) have investigated antecedents of customer trust. However, less attention has been devoted to check whether these factors can also be antecedents of online customer experience. The most likely drivers of online customer experience are the features of online stores which differentiate them from other traditional physical shops. The study of literatures makes it possible to identify those features such as convenience, interactivity and perceived risk. All of them are important features of online stores and could be direct or indirect drivers of customer online experience.

This paper will focus on how those factors are connected to trust and online customer experience; what are their effects, whether the effect is significant or ignorable; and what it means to e-marketers. By testing the relationship of those factors to trust and online experience, it is possible to identify factors that are important for the success of online business, and this will help marketers to focus on few things that matter the most, instead of considering everything that might be relevant. In this paper, after sufficient literature reviews, I was able set up a conceptual model that contains all main potential drivers of online customer experience.

The paper is divided into five chapters. First chapter includes the introduction of the research topic which gives the overview of the study regarding consumers' attitudes towards online shopping, followed by research purpose and research question.

Literature review is in the second chapter of this paper, and this chapter provides the basis of the theoretical framework that is used to discuss and analyze the area of interest. This chapter also presents previous literatures on consumers' attitudes towards online shopping, and theories and models used to discuss and analyze the problem.

Third chapter, the methodology part describes the research design and data collection method that are used in this study. It includes data collection, sampling design, experiment

design, measurement of variables, data obtaining method, and last but not least validity and reliability of this research.

In fourth chapter which is data analysis and discussion, I have carefully analyzed the data, by using statistical tools, graphs and tables. In this chapter I have answered the research question of this study after analyzing the empirical data collected through questionnaire strategy.

The last two chapters will be the conclusion of this research and the limitations of the conducted study.

2. Literature review

In the past many years, there has been a dramatic change in consumers' way of shopping. Although consumers still purchase products from physical shops, they feel the convenience of shopping online since online shopping has its own advantages: convenience and interactivity (Ali and Sankaran 2010).

2.1 Convenience

Online shopping reduces the time and effort of travelling to a physical shop. Decisions can be made at home by looking at various choices and prices which can be easily compared with each other (Ali and Sankaran 2010). This is because product information can be easily obtained from online catalogues and product descriptions on the Internet. Jin and Park (2006) argued that ease of obtaining information and depth of information at the website increase overall satisfaction. According to Beauchamp and Ponder (2010), information quality also affects satisfaction levels, because today's consumer is more time-starved than ever and thus it is appropriate to carefully consider the benefit of convenience to consumers.

Beauchamp and Ponder (2010) defined retail convenience as consumers' time and effort costs associated with shopping in a retail environment, and there are four dimensions of convenience relevant to retailers: access, search, transaction, and possession. Access convenience is defined as "the speed and ease with which consumers can reach a retailer". Online shoppers believe the time-saving benefit of accessing retailers via the Internet far outweighs the costs of delayed merchandise possession and the risks associated with shopping online. Search convenience is "the speed and ease with which consumers identify and select products they wish to buy". Benefits of search convenience for online shoppers include website design, navigation, and the selection and availability of product information. Transaction convenience is defined as "the speed and ease with which consumers can effect

or amend transactions". One of the main benefits of shopping online is that customers never have to wait in line. Possession convenience is defined as "the speed and ease with which consumers can obtain desired products". Included within the domain of possession convenience are in-stock merchandise, timely production and timely delivery. But online shoppers have to wait for their orders to be processed and delivered before obtaining their purchases. This time spent waiting for orders to be processed and delivered is a non-monetary cost associated with online shopping (Beauchamp and Ponder 2010).

There are two main concepts researchers mentioned regarding online convenience: perceived ease of use and perceived usefulness.

2.1.1 Perceived ease of use

Wu and Li (n.d.) argued that for some consumers, computer-mediated transaction seems very complex and difficult to complete; in particular, consumers who are not familiar with computers often give up. It seems true that few people would get involved with websites that are difficult to operate and to understand, or requires higher level of knowledge than they possess. Wu and Li (n.d.) suggested that ease of use refers to the degree of easiness for consumers to conduct external search in cyberspace and internal navigation and search within the website. According to Ling et al. (2011), the perceived ease of use is defined as the degree to which a person believes that using a particular system would be free of effort (time/energy), it is also an indicator of the cognitive effort needed to learn and to utilize new information technology. It can be seen as the perception of the customer regarding the amount of effort needed to learn and to use the website. Generally, ease of use may include an easy-to-remember URL address, well-organized and well-structured, easy to navigate and to use within the website, concise and understandable contents (Wu and Li n.d.). According to Wu and Li (n.d.), major factors which affect the ease of use of a website are: language used, arrangement of information, use of metaphors, size and contrast of letters. Ease of use usually relates to the degree of easiness felt by consumers in browsing and searching contents inside the websites, hence if the website could enable consumers to easily and quickly find the information or service they need, consumers would feel the excellence of

the websites. In reality, it is clear that if consumers are more familiar with online technology or products, they might have more confidence in their ability to engage with online shopping.

2.1.2 Perceived usefulness

According to Thomas and Veloutsou (2011), perceived usefulness is closely related to the perceived ease of use. Perceived usefulness is defined as the degree to which an individual believes that using a particular system would enhance his or her job performance, and it is a measure of the individual's subjective assessment of the utility offered by the new information technology in a specific task-related context (Ling et al. 2011). Rose et al. (2011) argued that perceived usefulness is the idea that the website will fit with and support the customer’s daily life. It is also a subjective perception by the customer regarding the site's utility in his or her shopping task (Ling et al. 2011). Thomas and Veloutsou (2011) argued that customers’ perception of the usefulness of the interactions with an online brand has implications for their attitude and behavior. For example, perceived usability positively influences online loyalty.

2.2 Interactivity

Marketing communications are the means by which firms attempt to inform, persuade and remind consumers (Moharam and Shawky 2012). Javadi et al. (2012) indicated that interactivity is the key distinguishing feature between marketing communication on the Internet and traditional mass media. Ali (2010) also argued that Internet marketing is conceptually different from other marketing channels and Internet promotes a one to one communication between seller and end buyer. There is much more electronic interactivity with the consumer in the form of emails and FAQs. Deighton (1991) mentioned that it's a marketer's dream to develop interactive relationship with every individual customer.

Fiore et al. (2005) defined interactivity as the extent to which users can participate in modifying the form and content of a mediated environment in real time. Definition of interactivity is given by Deighton (2007) as facility for individuals and organizations to communicate directly with one another without regard to distance or time. He also mentioned three features of interactive communication, which are "the ability to address an individual", "the ability to gather and remember the response of that individual" and "the ability to address the individual once more in a way that takes into account his or her unique response". Interactivity of a website offers benefits such as facilitated communications, customization of presented information, image manipulation, and entertainment for the customer (Fiore et al. 2005). Factors dependent on online interactivity, such as community building and online experience, have been embraced by online marketers to entice the consumer to visit the site, purchase online, and be satisfied enough to become a loyal customer (Fiore et al. 2005). Deighton (1991) argued that interactivity makes it possible to shift marketing strategy from producing generic products to tailoring products for particular customers. He mentioned that a firm’s marketing program can begin to explore the ideal in which each customer receives an individualized offering. Technology makes it possible to keep track of customer preferences and to tailor advertisements and promotions. New marketing doesn't deal with customers as a mass but creates individual relationships. Targeted communications will be less intrusive than broadcast advertising or indiscriminate junk mailing (Deighton 1991).

From the study of literatures, it can be concluded that there are four main factors within the interactivity concept: Personalization, responsiveness, word of mouth and control from marketers.

2.2.1 Personalization

Personalization is intimately connected with the idea of interactive marketing and applications of personalization have advanced greatly in conjunction with the Internet, since it provides an environment that is rich in information and well suited for interactivity (Montgomery and Smith 2008). The amounts and types of information available through

Internet today have simply enhanced the capability of people to sift only information that is relevant and useful to them (Kim 2002). Given the huge and rapidly growing amounts of computerized information, and the unprecedented level of competition for customers, personalization is one of the most important trends in businesses (Kim 2002). Montgomery and Smith (2008) defined personalization as the adaptation of products and services by the producer for the consumer using information that has been inferred from the consumer's behavior or transactions. Interactive marketing would allow the customer to be provided more pertinent information with less effort, personalization then is meant to eliminate tedious tasks for the customers, and allow the marketer to better identify the users' needs and goals from their past behavior (Montgomery and Smith 2008).

According to Bragge et al. (n.d.), personalization is considered as one solution for information overload as customers will receive only those promotions, services and products that are of interest to them. Bragge et al. (n.d.) argued that personalization is the main tool of attracting customers' attention and convincing them to purchase. For example, one could think “Personalized recommendations are tailored for me and therefore can be trusted”. However, Bragge et al. (n.d.) argued that the lack of human contact in an online purchasing context might lead to decreased loyalty among the customers. One way of preventing this could be to provide personalized online services to the customers by inferring from their previous behavior and expected needs about product and service offerings (Bragge et al. n.d.). Customers tend to seek information from interactive and personal sources when the products are perceived as more risky (Bragge et al. n.d.). The Internet can provide unique interactivity in online marketing process and increase the customers’ feelings of two-way interaction via personalized marketing messages (Bragge et al. n.d.). This might persuade them to initiate the purchase of risky products.

According to Dewan et al. (n.d.), the Internet provides unprecedented ability for marketers to learn about their customers’ desires and needs, to build a personalized product for each customer and sell it to him at a special price. Customers expect that organizations know about them and expect organizations to communicate messages that are of importance to them (Moharam and Shawky 2012). The Internet and technologies also allow sellers to build

a connection with specific individuals and to send a personalized message or product to a carefully selected audience (Dewan et al. n.d.). Through numerous tracking technologies and interactivity, the Internet provides the seller an opportunity to learn about their customers and to market a customized product. These technologies enable sellers to collect customer preference information on an individual basis (Dewan et al. n.d.). According to Kim (2002), personalization is the concept of one-to-one marketing in which a business delivers information that is relevant to an individual or a group of individuals rather than to the entire population.

There are different types of personalization. According to Bragge et al. (n.d.), one-to-one personalization can be divided into two types of personalization: individual personalization and mass personalization. Individual personalization means treating each customer differently. Examples of individual personalization include displaying certain products, services or information on a web page that may be of potential interest to a particular website visitor (Kim 2002). Mass personalization means putting individuals who share common interests or characteristics into groups and treat each group as one unit. Examples of mass personalization include a group of individuals receiving only information about comedy and sports programs in television program guides; stock trading histories of only the past 3 months of 30 selected companies (Kim 2002).

However, personalization is not always beneficial to retailers. According to Montgomery and Smith (2008), there is a tradeoff between information to implement personalization and the potential violation of privacy that comes with this information. Personalization for one-to-one marketing by businesses may sometimes backfire on the businesses if the use of customer data violates or appears to violate customers' privacy (Kim 2002). Privacy plays an important role in creating customers' attitudes towards marketing. The Internet has already been proved to be a great means of disseminating information instantly worldwide and obtaining all sorts of information instantly from anywhere in the world (Kim 2002). Many customers thus fear that marketers know too much about them and use their information irresponsibly (Moharam and Shawky 2012).

According to Bragge et al. (n.d.), consumers have desires to be left alone, and the attitudes toward the self-referent information in promotional messages will be rather negative if the information is considered as excessive or irrelevant. It means the self-referent information should not occupy too much in the messages. Excessive marketing includes offering too many recommendations (e.g. too many items suggested for purchase), “bombarding” customers (e.g. every week, or every time a customer visits a website), and “encumbering” customers (e.g. requiring too many questions to answer) (Kim 2002). Irrelevant marketing includes inaccurate or irrelevant recommendations as well (Kim 2002).

Montgomery and Smith (2008) argued that high degrees of personalization are not always beneficial, since consumers may respond negatively when messages are personalized but the perceived value of the service is low.

2.2.2 Responsiveness

Customers expect online stores to respond to their inquiries promptly. According to Lee and Lin (2005), responsiveness describes how often an online store voluntarily provides services (e.g. customer inquiries, information retrieval and navigation speed) that are important to its customers. For example, it is reasonable to think that if the products are delivered on time or faster, or problems are solved instantly, most customers will generate positive experiences, and thus be more satisfied with that online retailer. In case of physical shops, they might be more responsive considering that customers can have a direct communication inside the shop, but only during the opening hours. It is almost impossible to get any more feedback or answers from the shop side when it is closed. In this sense, customers can get more responses from online stores since they normally have longer opening hours or service periods. Researchers examining the responsiveness of web-based services have highlighted the impact of responsiveness on customer satisfaction (Lee and Lin 2005).

2.2.3 WOM

Deighton (2007) argued that word of mouth is a major part of online consumer interactions within the environment of online communities. Chevalier and Mayzlin (2004) identified "word of mouth" or between-customer communication, as a probable driver of consumer decision-making. According to Chevalier and Mayzlin (2004), online user reviews have become an important source of information to consumers, substituting and complementing other forms of word of mouth communication about the quality of various products. Chevalier and Mayzlin (2004) mentioned that there has been a long-held belief in marketing that word of mouth drives sales. For example, if a particular book has more reviews and higher-starred reviews at one site, that book will tend to have a higher market share at that site. Study from Chevalier and Mayzlin (2004) has shown that customer word-of-mouth has a causal impact on consumer purchasing behavior at Internet retail sites. Their study also showed that customers certainly behave as if the fit between customer and online product is improved by using reviews to screen purchases. Consumers can communicate among themselves by exchanging different information. For example, product quality can be analyzed in detail with the help of customer recommendation and ratings (Ali 2010). According to Javadi et al. (2012), subjective norms have a positive effect on shopping behavior. Subjective norms capture the consumers' perceptions of the influence of others (e.g., family, peers, authority figures, and media). This means the more people suggest e-buying to each other, the more this buying method will be popular among people. This makes the use of word of mouth marketing necessary for retailers.

2.2.4 Control

Today online consumers have more control and bargaining power than consumers of physical shops because the Internet offers more interactivities (such as WOM) between consumers and sellers, as well as greater availability of information about products and services. Deighton (2007) argued that the main interaction often happens not between visitor and machine but between visitor and visitor, or visitor and staff member. Customers use digital media that lie beyond the control of marketers to communicate among one another, responding to marketing's intrusions by disseminating counterargument, information

sharing, rebuttal, parody, reproach and so on. Lee and Chen (2010) defined controllability as consumers' judgments about the availability of resources and opportunities to perform online consumption. Javadi et al. (2012) claimed that the Internet shifted the balance of power in favor of consumers as it became very easy for them to make shopping comparisons and evaluate alternatives without being pressured by salespeople.

2.3 Perceived risk

Besides those advantages mentioned above, online shopping has one other important feature--perceived risk of customers, which can be considered as main disadvantage of online shopping. According to Javadi et al. (2012), perceived risk refers to the nature and amount of risk perceived by a customer in contemplating a particular purchase decision. Perceived risk is defined by Ganguly, et al. (2009) as the uncertainty that the customers face when they cannot foresee the consequences of their purchases. As customers can neither see the product physically nor control their online payments in virtual world, online shopping creates a perception of uncertainty or risk in online transactions. For example, the product received is in bad condition, broken or some of the parts are missing; consumer's credit card information is leaked to someone else and so on (Ali 2010). The higher the perceived risk, the more consumers may shift to the brick-and-mortar retailer for the purchase of the product (Javadi et al. 2012). Javadi et al. (2012) argued that the most frequently cited risks associated with online shopping include financial risk, product risk, convenience risk and non-delivery risk. However, the result of their study showed that only financial and non-delivery risk have significant effect on customers' attitude toward online shopping.

According to Ling et al. (2011), concept of perceived risk can be classified into two types of risks in the online retailing environment: security risk and privacy risk. Security provided by an online retailer refers to the safety of the computer and credit card or financial information (which can be considered as financial risk); perceived privacy is defined as the consumers' ability to control the dissemination of information provided during the online transactions and the ability to control the presence of other people in the environment during the online

transaction (Ling et al. 2011). So in this study, perceived risk will be studied from three aspects: security, privacy and non-delivery risk.

2.4 Trust

Trust is defined as a belief or expectation that the word or promise of the merchant can be relied upon (i.e. credibility) and that the seller will not take advantage of the customer's vulnerability (Jin and Park 2006). According to Ling et al. (2011), trust is defined as a tendency of one party that is willing to accept the actions of the other party even though the first party is not being protected by the second party and fail to control the actions of the second party. Ling et al. (2011) argued that when a person trusts the other party, feelings of confidence and security arises within the person towards the other; when a person trusts another person, the person is confident and willing to have faith in the other partner who is involved in the exchange process. According to Büttner and Göritz (2008), most scholars agree that trust has three major opponents: (a) uncertainty about the outcomes of an interaction, (b) personal harm as a possible outcome of the interaction and (c) lack of influence on the outcomes. Büttner and Göritz (2008) argued that trust encompasses four dimensions: ability, benevolence, integrity and predictability. Ability refers to the trustee's competence to fulfill promises given. Benevolence denotes that the trustee is interested in the other's well-being. Integrity means that the trustee follows a set of desirable principles. Predictability means predictability of the trustee's behavior.

2.4.1 Convenience-trust

Ling et al. (2011) argued that customers are most likely to trust the company when they browse the company's website which is easy to use. In an online environment, there is no sales person but the customer interacts with the website instead, therefore the virtual interaction will provide necessary cues to increase the initial trust towards the online retailer (Ling et al. 2011). Useful and easily understood information on the websites can reduce asymmetric information, and lift the degree of trust (Ling et al. 2011). Ling et al. (2011) also

argued that perceived ease of use can build up online trust as well as increase the perceived usefulness of e-commerce, and websites that are easy to use and useful may lead to the increase of customers' trust in online retailers.

2.4.2 Interactivity-trust

Ganguly et al. (2009) argued that communication is part of e-quality and is an antecedent to satisfaction. Similarly, timely communication generates trust by resolving disputes and ambiguities. Thus we can assume proper communication within the online store has a positive effect on consumer trust with that online store. On the contrary, the inability to interact with a salesperson and retailer, as well as electronic payment methods, increases consumers' perceived risk of online purchase (Jin and Park 2006).

2.4.3 Perceived risk-trust

Ling et al. (2011) argued that reduced perception of risk in the online environment can help increase online trust because perceived risk is a strong trust antecedent. Ling et al. (2011) also argued that online transaction can create a sense of powerlessness among online shoppers and so it is easier to convince consumers to stay with the company when consumers have a higher degree of trust in the company. Consumers will tend to make judgments about an online store based on their degree of trust which will positively influence their behavior. Lack of trust has become one of the most frequently cited reasons why consumers do not engage in e-commerce (Ling et al. 2011). Therefore, trust is a very important factor that affects the success of an online web store.

2.4.4 Trust-Brand experience

Meanwhile, trust influences customers' intentions to engage in online experience and lack of trust is a primary reason why customers stay away from interactions with online brands. Trust positively influences customers' attitudes towards online purchasing and has a

mitigating effect on other sources of uncertainty such as privacy concerns, fears of opportunism, or insecurity (Thomas and Veloutsou 2011). So once customers have built faith in the online retailer that they are going to interact with, they will highly possibly have better experience with less worries or concerns being involved.

2.5 Brand experience

According to Danaher et al. (2003), a useful way of explaining the role of the brand in a virtual environment is to use the classification of search and experience attributes used by customers in the decision-making process. Search attributes can be determined by inspection prior to the purchase of the brand; whereas experience attributes can only be determined after the purchase has occurred (Danaher et al. 2003). According to Brakus et al. (2009), brand experience is conceptualized as sensations, feelings, cognitions, and behavioral responses evoked by brand-related stimuli (such as brand-identifying colors, shapes, typefaces etc.) that are part of a brand's design and identity, packaging, communications, and environments. Brakus et al. (2009) also mentioned that brand experience doesn't occur only after consumption, they occur whenever there is a direct or indirect interaction between customers and brand. This argument gives us an intuition that understanding what is interactivity, and how it affects customer experiences is very important.

Customers might generate positive or negative experiences by interacting with online brands. Thomas and Veloutsou (2011) argued that positive online brand experience occurs when the net value of good interactions with the brand exceeds the value of negative ones. Those experiences would further affect how customers act or feel in the future. According to Thomas and Veloutsou (2011), satisfaction is one consequence of positive emotional and cognitive states of online brand experience. Satisfaction is an emotional feeling that is generated through customers' behavioral or consumption experience. Other consequences might include a person's intention to revisit a website, re-purchase intentions or loyalty. Positive brand experiences generate repeated interactions and as the frequency and duration of the customer–brand interaction increases, online brand relationship forms. Customer

loyalty is an attitude formed through repetitive customer experience. Some brand experiences happen spontaneously and are short-lived; others occur more deliberately and last longer, and over time, these long-lasting brand experiences stored in consumer memory, should affect consumer satisfaction and loyalty (Brakus et al. 2009). Rose (2011) argued that there is a positive relationship between satisfaction and online repurchase intention. It is not hard to believe that customers would come back to the particular retailer for repurchasing when they are satisfied with previous experiences with that retailer. This means online brand experience might have both a direct effect on repurchase intention and an indirect effect via customer satisfaction.

Walter et al. (2013) argued that brand experience positively affects consumer satisfaction and loyalty. Experiences have positive effects on emotion and emotion has a positive effect on the behavioral intention – through the means of satisfaction. Brakus et al. (2009) constructed a brand experience scale with four dimensions: sensory, affective, behavioral and intellectual.

One of the critical aims of retailers is to increase consumers' experience related attitudes, such as trust, satisfaction, and loyalty (Jin and Park 2006). Satisfaction and loyalty are two required things for the well-being, profit and long term growth of the firms (Ali 2010). Trust before a specific exchange episode enhances consumers' post purchase satisfaction, and customer satisfaction can be achieved only when customers feel comfortable about placing orders over the Internet (Jin and Park 2006). Therefore, we expect a positive relationship between trust and satisfaction.

2.6 Satisfaction

Satisfaction is defined as the perception of pleasurable fulfillment and it occurs when the retailer's performance matches or is higher than customers' expectations. Overall, prior

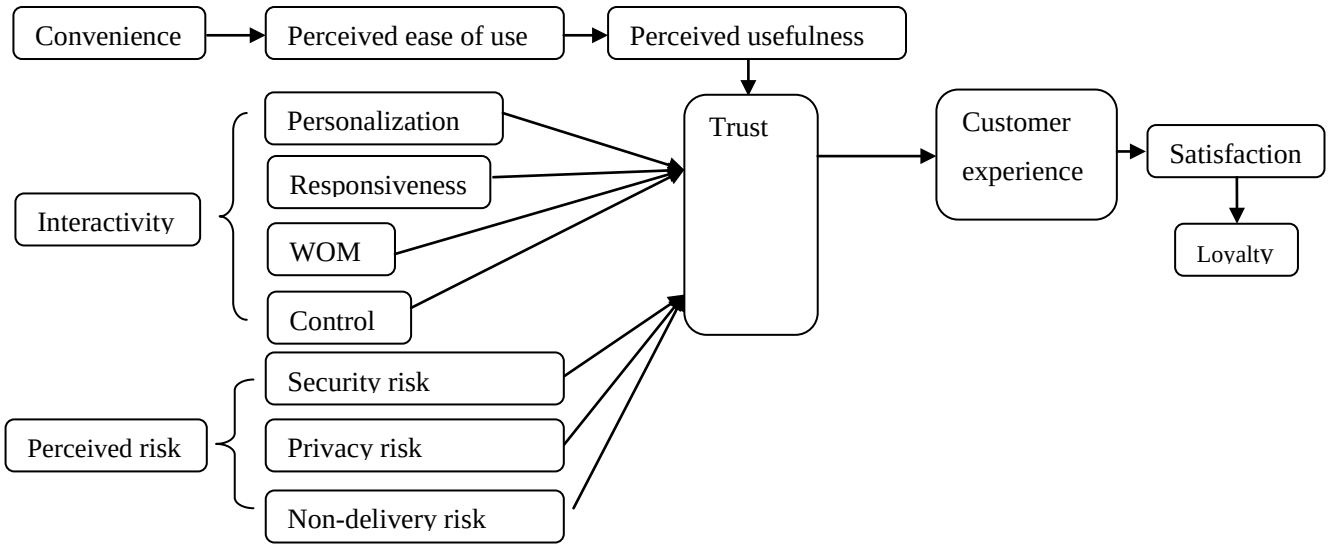
studies indicate that satisfaction toward an e-tailer depends primarily on customers' evaluation of performance on various online store attributes (Jin and Park 2006).

2.7 Loyalty

Considerable studies have confirmed that trust is a significant driver of customer loyalty. Retailers must first gain trust, since trust might be more important in establishing loyalty in online retailing than in offline purchasing. And trust is consistently associated with online loyalty in a number of contrasting national contexts (Jin and Park 2006). Overall, a significant positive relationship between satisfaction and loyalty has been sufficiently documented (Jin and Park 2006). Satisfaction is viewed as the "seed" out of which loyalty develops (Jin and Park 2006). The relationship between satisfaction and loyalty is found to be stronger in online stores than offline (Jin and Park 2006). Therefore, we can assume consumer satisfaction positively influences consumer loyalty toward e-tailer.

Following is the conceptual model and hypothesizes inferred from the theory:

Theoretical model



Hypotheses:

H1: Personalization has a significant effect on customer trust

H2: Personalization has a significant effect on customer experience

H3: Personalization has a significant effect on customer satisfaction

H4: Personalization has a significant effect on customer loyalty

H5: Trust has a significant effect on customer experience

3. Methodology

3.1 Research method

In this chapter, research design and data collection method of this paper are discussed. An overall strategy used to collect data is presented and issues of data reliability and validity are discussed.

In order to establish causal relationships between predefined variables, this paper is taking an explanatory research approach. The emphasis here is on studying a problem or a phenomenon in order to explain the relationship between different variables.

In general, a quantitative method is used in this study. According to Saunders et al. (2009), quantitative methods are those which focus on describing a phenomenon across a larger number of participants, thereby providing the possibility of summarizing characteristics of groups or relationships, such as experiments and questionnaires, which can provide information that is fairly reliable and is easy to be analyzed statistically. Saunders et al. (2009) also suggests that quantitative research can be faster than qualitative research as it is possible to forecast the time schedule, whereas qualitative research can be relatively long in duration. A master thesis as a research project for academic reasons is time limited, and this is why the quantitative approach is preferable in this study.

The goal of this study is to figure out factors that affect customer online experience, and by using a quantitative approach, which allows control and manipulation of variables, it is possible to collect a sample of numerical data on each variable, and to test and identify relationships between dependent and independent variables. The data collection strategy of

this paper is to create questionnaires for available respondents. It includes sampling, scenario design, survey design, scale selection and formation.

3.2 Data collection

There are two types of data in general that can be collected by researchers, primary and secondary data. Primary data is information collected directly by the researcher through instruments such as surveys, interviews, or observations, whereas secondary data is one which is already collected by someone else from other researches but not for the purpose of particular study or research (Saunders et al. 2009). Thus primary data is collected for the purpose of this study. An advantage of using primary data is that it is usually very accurate and up-to-date and more importantly, researchers can collect tailored information for their specific purposes of studies (Saunders et al. 2009).

3.3 Sampling

Sampling is one of the best approaches to analyze views of a large number of people about a specific product or service (Saunders et al. 2009). A sample represents an entire population and studies on this sample can be used to estimate characteristics of that entire population. The sampling techniques can be divided into two types: probability sampling and non probability sampling.

With probability samples, the chance of each case being selected from the population is known and the chances are usually equal for all cases when it is simple random sampling. There are four types of probability sampling as stated by Saunders et al. (2009): simple random sampling, systematic sampling, stratified random sampling and multi stage cluster sampling.

For non-probability samples, the probability of each case being selected from the total population is unknown. It is still possible to generalize from non-probability samples about the population, but not on statistical grounds. According to Saunders et al. (2009), there are three types of non probability sampling: quota sampling, snowball sampling and convenience sampling.

Strictly speaking, probability sampling is a better option for this research purpose, but considering the limitations of time and resources, this paper will have to make the use of one of the non-probability sampling techniques, convenience sampling. However, statistical analysis will still be applied in order to illustrate the research process of using the probability sampling method, and to make statistical inferences about the characteristics of the large population from the sample. A convenience sample is one that is conveniently available to the researcher with its goodness of accessibility (Bryman and Bell 2007). Publicity for convenience samples can take several forms. These include articles and advertisements in magazines that are popular among the population; postings on appropriate Internet interest groups and discussion groups; hyperlinks from other websites as well as letters or emails of invitation to colleagues and friends (Saunders et al. 2009).

For this study, the sampling is done by posting survey link on one of the most popular online communities--Facebook. Due to the widespread usage of Facebook among most students at NHH, it was possible to approach the required number of respondents and to collect the data in time and also to avoid a low response rate. The population selected for this study is mainly students of NHH due to limited resources. However, considering that students are an important part of online shopping, the results will still be able to provide some valuable insights. A link of online web survey was exposed to those respondents and more than 200 respondents participated.

3.4 Experiment

The purpose of an experiment is to study causal links such as whether a change in one independent variable produces a change in another dependent variable. Experiments therefore can be used in explanatory research to answer ‘how’ and ‘why’ questions (Saunders et al. 2009). By manipulating one of independent variables, it is easier to see the effect of that independent variable under different conditions. In this paper, this manipulated variable is personalization which is part of one of online shopping features -- interactivity. This is because personalization is one of few factors that can be controlled in the questionnaire strategy without having too many obstacles in presenting it to the respondents. Due to the limitations of time and effort, it is not applicable to manipulate all other variables in this paper.

In this paper three scenarios are established and all respondents are assigned randomly to each scenario. Random assignment allows me to make causal conclusions about the effect of the manipulated variable on another variable. This process helps assure that three groups are similar to each other before treatment begins. Therefore, any post-study differences between groups shouldn’t be induced by prior differences of those groups. In these scenarios, the experimental treatment, which is in a form of planned variable manipulation, such as giving different levels of personalization (individual, mass and low), is made subsequently. The respondents who are facing those three scenarios will be given exactly the same conditions in all other aspects except planned manipulation in each scenario. The relevant dependent variables in this paper: trust, customer experience, satisfaction and loyalty are measured along with the manipulation of the independent variable --personalization. This means that a comparison can be undertaken among results of three scenarios. On the basis of this comparison, any difference among the results can be attributed to the manipulated variable.

3.4.1 Scenario development

Each scenario is designed to describe a normal online shopping process but with different attributes of the online store -- individual personalization, mass personalization and low

personalization. A fictitious character named Johnny was created to engage in an online shopping behavior, and he will experience different services from the online store he uses in each scenario. The respondents are expected to identify these differences in three scenarios and thus few pre-tests were done with a small number of people.

First, I made three different stories about how Johnny purchased a computer by using online stores with different features in terms of personalization. In order to present different levels of personalization, I used some specific words or phrases that can avoid direct leading of respondents' thoughts, while still presenting the differences of personalization levels. For example, in the case of individual personalization (Scenario 1), I used terms like 'MY SITE', 'advanced search service' for preference, 'particular message' for feedback to show the individualized service that Johnny received. In case of mass personalization (Scenario 2), phrases such as 'common characteristics', 'common message', 'similar interests' are used to describe the fact that Johnny is treated as a group consists of similar customers rather than individually. For the low personalization case (Scenario 3), no such stimulating words are given since it describes an online store that does not give much personalized service. Then three scenarios were sent to my fellow students and several questions were asked to see if they actually respond as I expect them to do. For example, questions like 'What is your overall impression about the online store?', 'Do you think Johnny receives personally relevant information or common information?', 'Do you think the online store treats Johnny differently or same as others?' and so on. By checking their answers and feedback, I was able to modify and improve my scenarios to be ready for my questionnaire. Knowing that most participants of my pre-tests can address the difference among scenarios, the final version of scenarios was created as below.

Scenario 1

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic products) he used last time. Since he is a registered user, he is guided to his personal page called 'MY SITE' on the website, where the page display is based on his own recent navigation path. The computers on the page are of potential interest to Johnny himself. He proceeds to browse by using advanced search service where he can specify more detailed

preferences. The system presents a summary of information of 5 computers, and he quickly locates the computer he wants. He puts the computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, system asks him if he wants to receive tailored recommendations or information about special promotions in the future. He selects 'yes' by specifying particular products he is interested in. Then he moves to his personal file page and adds the email address that he uses most frequently. He exits the system and rushes to the living room to watch a movie. A few days later, the online store sends Johnny a particular message to notify him that one of the products he specified is on sale. He likes it and wants to buy it soon.

Scenario 2

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic products) he used last time. Johnny logs in and the page display is based on recent navigation paths of a group of individuals (including Johnny) who share common characteristics. The computers on the page are of potential interest to them. He proceeds to browse a few more pages for a while and finds the specific computer he wants. Then he puts the computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, the system asks him if he wants to receive recommendations or information about special promotions in the future. He selects 'yes' and then moves to his personal file page and adds the email address that he uses most frequently. He exits the system and rushes to the living room to watch some movies. A few days later, the online store sends out a particular common message to Johnny and a few others who have similar interests as Johnny. Johnny likes some of the products under recommendations.

Scenario 3

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic product) he used last time. Since he is a registered user, he starts to look for products he wants. He looks on the main page and a lot of products and information are shown on top of the page, but he can't find the one he likes. He proceeds to browse many more pages for a long time and finds the specific computer he wants. Then he puts that computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, the system sends him a confirmation email which starts with 'Dear customer, ... the payment is

completed...' He exits the system and rushes to the living room to watch some movies. A few days later, he checks the site again and finds that some products are on sale. He is interested in those products and wants to buy it.

3.5 Survey

In this paper, the questionnaire strategy is used to carry out an experiment. According to Saunders et al. (2009), survey method usually contains a large amount of data in a highly economical way. These data are standardized and allow easy comparison. In addition, the questionnaire strategy is generally perceived as authoritative and easy to understand. Meanwhile the data collected by survey is quantitative data which can be used for numeric analysis. According to Ali and Sankaran (2010), benefits of survey data collection are as follows:

1. Relatively fast to conduct.

2. Response rates are typically high.

3. Ease of sending reminders to participants.

4. Ease of data processing like spread sheet or database compared to manual entry.

However, the data collected by the survey is unlikely to be wide-ranged. For example, there is a limit to the number of questions that one questionnaire can contain according to the respondents' willingness to finish the questionnaire.

3.5.1 Questionnaire design

A self-administered questionnaire is designed to meet the requirements of the research. This kind of questionnaire is usually completed by the respondents and is administered electronically using the Internet (Internet-mediated questionnaires) or intranet (intranet-mediated questionnaires), or posted to respondents who will return them by post after completion (postal or mail questionnaires) (Saunders et al. 2009). Internet-mediated questionnaires are offered in this study for better response rate, since most respondents can read and respond at their personal computers.

The questions are taken from previous literatures about customer's experience or attitudes towards online shopping, with a view to validate the research better, and some of the questions are adjusted to cover the particular purpose of my research problem. The questionnaire consists of two main parts and one sub part, the first part is mainly focused on providing scenarios that need to be read before answering any questions followed by the second part, which focuses on questions pertaining to factors that influence customers to shop online. The third part of the questionnaire covers in terms of demography and to see if there are any differences in relation to factors such gender and age.

Part 1:

Present one of the three scenarios that are developed above.

Part 2:

This part of the questionnaire will cover the questions about factors mentioned in the conceptual model. These factors are convenience, interactivity and perceived risk. Convenience is represented by two variables: perceived ease of use and perceived usefulness. There are two questions selected from previous literatures to measure convenience; five questions pertaining to interactivity features of online shopping; three questions related to perceived risk factors; four questions related to trust which is same for

customer experience; one question for satisfaction and loyalty, respectively. All questions in this section are combined with 5 point Likert scale ranging from 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) to 5 (strongly agree). In this format the respondents are allowed to express the degree of their experience or opinion about the characteristics of online stores. The Likert scale is commonly used for questionnaires, and it is easy for researchers to interpret the analysis. According to Robson (1993), one advantage of using Likert scale is that it can be interesting for respondents and they often enjoy completing a scale like this. Another advantage can be simplicity and the ease of use.

Part 3:

This is final part of questionnaire, and as suggested by Grossnickle (2001), easy questions must be put at the end of the questionnaire, as the respondent can lose their interests after answering 20 questions in the first two parts. This is why I have decided to put demographic questions at the end of the survey. This part includes questions pertaining to gender, age and purchasing frequency.

3.6 Measurement

Ali and Sankaran (2010) argued that questionnaire designing is of great importance in a survey. According to them, the survey questions should be precise and clear. Taking this into consideration, the survey questions in this research are designed in simple and easy language. I kept the language very simple because there are chances for misinterpretation by respondents as the survey is being performed virtually and there is no face to face interaction. Respondents were asked to provide their ratings in order to understand their expectations of the online store and examine what causes their satisfaction and loyalty through online shopping experience.

The table below shows relevant questions asked to measure each variable that is identified in the conceptual model:

Variables	Questions
Convenience	
Perceived ease of use	1. Online shopping makes my shopping easy
Perceived usefulness	2. I find online stores useful
Interactivity	
Responsiveness	3. I think online stores provide prompt service
Word of mouth	4. When I make a purchase, opinions of people that I know are important to me
Control	5. All necessary resources such as product information, customer reviews or ratings are accessible to me
Personalization	6. The online store provides recommendations that match Johnny's need
	7. The online store provides relevant information for Johnny
Perceived risk	
Security risk	8. It is safe to use credit cards when shopping online
Privacy risk	9. My personal information is treated confidential by online stores
Non-delivery risk	10. I often do not receive the product ordered online
Trust	11. As compared to physical stores, I think an online store like in the scenario can satisfy its customers better
	12. As compared to physical stores, I can expect to be treated fairly by an online store like in the scenario
	13. As compared to physical stores, I trust information from an online store like in the scenario
	14. As compared to physical stores, I think an online store like in the scenario can be more trusted to keep its promises

Customer experience	15. As compared to physical stores, I think an online store like in the scenario can be more visually interesting
	16. As compared to physical stores, I think an online store like in the scenario can induce more feelings and emotions (e.g. fun, intimacy, inspiration)
	17. As compared to physical stores, I think an online store like in the scenario requires less physical actions and behaviors (e.g. site search, information search, chatting)
	18. As compared to physical stores, shopping in an online store like in the scenario requires a lot of thinking
Satisfaction	19. As compared to physical stores, I will be more satisfied with the shopping experience from an online store like in the scenario
Loyalty	20. I would consider purchasing products from the online store in the scenario

3.7 Obtaining data

As mentioned above, various online communities are used to distribute questionnaires, and out of total 211 started questionnaires, 85 questionnaires were completed by respondents through the online software link nhh.eu.qualtrics.com and the other 126 questionnaires remained unfinished, including those who just clicked on the link but did not even get started. The survey was posted on online community sites for two weeks and each questionnaire lasted from 2 to 10 minutes on average. After taking out outsiders and answers with missing data, 74 questionnaires were finally extracted from the database. This is reasonable because I am manipulating one variable within 3 scenarios, so given 20 responses for each scenario, 60 will be the minimum required sample size.

After receiving the raw data, the next step was to input the data into software for later analysis. The data is recorded in an online survey tool known as Qualtrics, and it took few minutes to download the data from its database. Virtually all data collected by questionnaires will be analyzed by a computer program. The software used to analyze the data is SPSS

(Statistical Package for the Social Sciences). SPSS is a very good program that is used for statistical analysis. In many ways, SPSS is comparable to Excel with many useful functions. It can be used to calculate and to make diagrams. Correlation analysis can be used for understanding relationships of variables; regression analysis can be used for understanding causal relationship of variables; analysis of variance (ANOVA) can be used to check variation of different groups.

3.8 Validity and reliability

Validity is concerned with whether the findings are really about what they are supposed to be; if the statements that are designed in real terms measure what is actually meant to measure (Saunders et al. 2009).

The questionnaire in this study is closely linked with the research question, as part 2 of the questionnaire deals with questions pertaining to each of the factors that is defined in the conceptual model. Every variable mentioned in the conceptual model is measured by relevant question items with the same scale of measurement. The questionnaire is constructed in a way that it does not differentiate respondents, as each respondent faces equal chance of being exposed to one of three scenarios and all the same questions were asked in any case. The questionnaire is also constructed in a way that it does not drive away the respondent, as sensitive questions in nature such as income and race are not being asked in any part of the questionnaire, so that I can avoid the risk of respondents refusing to take or submit the survey. Questionnaires are not distributed in a particular setting or a place as I have distributed the questionnaires through different online communities and interest groups, in order to get the diversified population from different demography. As most of the survey questions are being extracted from previous literatures done in the area of customer experience or attitudes towards online shopping, this proves the validity of this study being able to measure what it is meant to measure.

Internal validity refers to the extent to which the study has taken into account alternative explanations of cause and effect (Saunders et al. 2009). In this study, the experiment is designed with single treatment -- personalization. It means that the personalization feature is the only difference between each questionnaire and all other factors remain the same. In this way, threats to internal validity can be eliminated by removing the possible effects of an alternative explanation to the personalization.

On the other hand, external validity is likely to be more difficult to establish. This is because of the very nature of experimental settings, which are unlikely to be same as real world conditions. External validity is a concern about whether the results of the research are generalisable or not: that is, whether the findings can be equally applicable to other research settings, such as other organizations (Saunders et al. 2009). Considering the research is mainly done for students in NHH, it is not clear that whether the result would also represent people from outside of NHH or Norway. As a consequence, the extent to which the findings from an experiment are able to be generalized to all organizations needs careful consideration.

Reliability refers to the extent to which the data collection techniques or analysis procedure will yield consistent findings (Saunders et al. 2009). It can be assessed by posing the following three questions:

1. Will the measures yield the same results on other occasions?

2. Will similar observations be reached by other observers?

3. Is there transparency in how sense was made from the raw data?

The variables are measured by standard 5 point Likert scale; the data is analyzed by professional statistical analysis software -- SPSS and the whole analysis is guided by theoretical framework, all these facts will support the reliability of my research findings.

Quantitative study requires validity and reliability of survey questions. One way of ensuring that is to do some pre-tests before sending out the final survey. This is done by giving surveys to a small group of people and check if the flow of the survey is following researcher's expectation. Another possible way is to find scales from existing studies and adjust them to the specific study of researcher. This is not the best approach but can be used as an alternative when the researcher doesn't have much time or resources and it would be better than making up new scales for every variable without testing. In this study, not many pre-tests were done due to the limitation of time, but all the relevant scales were found from existing studies and were adjusted for the purpose of this paper. This will assure the validity and reliability of the study to a certain extent.

4. Data analysis

In this chapter, the empirical findings from this study will be discussed. The data analysis mainly concerns primary data collected in the form of questionnaires, which were distributed among students of NHH through online community groups. The whole analysis is divided into three parts according to the purpose of analysis. First descriptive analysis is done to see the overall features of the respondents' attitudes toward predefined variables. Then variance of variables between each scenario will be discussed to identify the unique features or differences among respondents' attitudes, and further the significance of the difference between each scenario will be discussed in order to understand the effect of manipulated variable on dependent variables. Finally, regression analysis is done to see the causal relationship between several variables.

In this study, a total number of 85 questionnaires were finished by participants. Most of the variables were measured by one question for each, and the mean values of those variables are simply arithmetic average of total responses for each variable. However, personalization is measured by two questions in the survey, and the mean of two questions is calculated as the value of personalization perceived by each respondent. For example, given a 5 point scale, if one respondent strongly agrees on the first question of personalization, and agrees on the second question, the mean value of personalization is (5+4)/2=4.5. Then take the average of mean value of total respondents in three scenarios, the overall average value of personalization will be calculated. The same method is applied to variables such as trust and customer experience where the value is measured by more than one question items. After taking out partly finished responses or missing data, there are 74 responses selected for this study.

Considering personalization is the only variable that is manipulated in this study, here we mainly discuss about the variance of personalization within three scenarios and other

dependent variables that are assumed to be affected by personalization. Before that, general information of demographic data is provided below.

4.1 Descriptive analysis

4.1.1 General information

1. Scenarios:

The following table presents the results of SPSS frequency analysis on Scenarios. (Scenario 1: individual personalization; Scenario 2: mass personalization; Scenario 3: low personalization)

Scenario

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Scenario 1	26	35.1	35.1	35.1
	Scenario 2	23	31.1	31.1	66.2
	Scenario 3	25	33.8	33.8	100.0
	Total	74	100.0	100.0	

From the output shown above, it can be seen that 26 respondents were exposed to the Scenario 1; 23 were exposed to the Scenario 2 and 25 were exposed to the third scenario.

The reason why the number of respondents in each scenario is not exactly the same is that those scenarios were set to be distributed automatically by the survey making software--Qualtrics, evenly among all respondents. All scenarios have gained more than the minimum required number of 20 responses and the number of respondents in each scenario is quite close to each other, so the relative contribution of each scenario is more or less the same, around 33%. This makes sure the analysis of all three scenarios is meaningful and unbiased.

2. Gender:

The following table presents the results of SPSS frequency analysis on gender (sex).

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	47	63.5	63.5	63.5
	Female	27	36.5	36.5	100.0
	Total	74	100.0	100.0	

The output above shows that among 74 respondents, who participated in this survey, 47 were males and 27 were females. It can be the result of more males using those online communities, where the questionnaires were distributed. This means 63.5% of this study may represent males' attitudes toward online shopping, while 36.5% will be the contribution from females. However, the result will not be biased as long as online retailers are not exclusively targeting just one sex, and most of the results will still be able to provide meaningful insight for online retailers.

3. Age:

The following table presents the results of SPSS frequency analysis on the age range of respondents.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<20	2	2.7	2.7	2.7
	20-25	56	75.7	75.7	78.4
	25-30	11	14.9	14.9	93.2
	>30	5	6.8	6.8	100.0
	Total	74	100.0	100.0	

In the survey, respondents were asked to select from different options with regards to their age. There are four age ranges available and the output above shows that most of the respondents who participated in this survey were from 20 to 25 years old, which is about 75.7% of the total sample size. This is because most of the questionnaires were exposed and distributed among the students in NHH, thus the result of this study would mostly represent thoughts of students (between 20-25 years old) on online shopping instead of whole possible age groups'. Considering students are some of the most active online users nowadays, the results will still be worthy.

4. Purchasing frequency (per month):

The following table presents descriptive analysis of monthly purchasing frequencies of respondents.

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Frequency	74	6.00	.00	6.00	1.2391	1.27444
Valid N (listwise)	74					

It can be seen that monthly mean purchasing frequency of respondents are around 1.2, which means they at least use online shopping once per month, and the highest purchasing frequency is about 6 times in a month while the lowest one is zero. The respondents with zero purchasing frequency are not excluded from the sample, considering the cases that they might have just stopped using online shopping recently or about to use it soon (late adapters), so it is still important to know the opinions of those groups of people, for example, what are their ideas of using online shopping or what can attract them to use online shopping. In any case they are still potential customers and by addressing those people, online retailers can increase their sales by attracting more customers to purchase from their online stores.

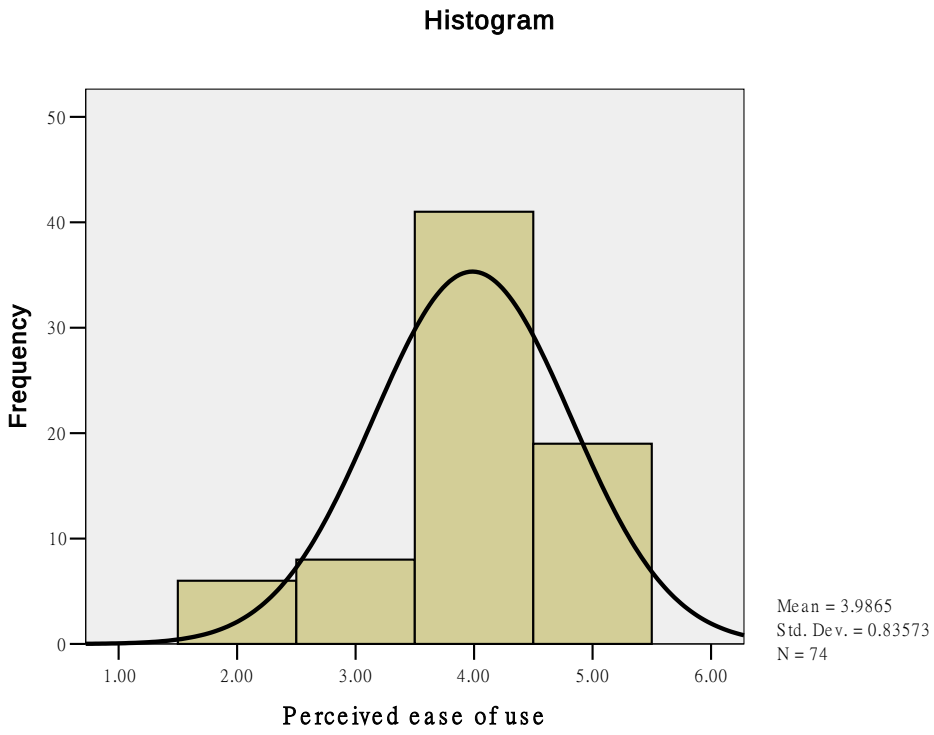
4.1.2 Independent variables

In the output presented below, the information of key variables measured in the survey is summarized, which are convenience, interactivity and perceived risk. It shows the frequency of respondent's agreement level plus mean and standard deviation of variables to scrutinize

the overall response scores. There is no frequency figure for personalization, trust and customer experience since the frequency is counting the number of 5 scale statements, and those statements represent integral numbers from 1 to 5. As the values of above 3 variables are measured by mean of two or more questions, the values are not all integers, and thus cannot be counted with the 5 given statement options.

1. Convenience

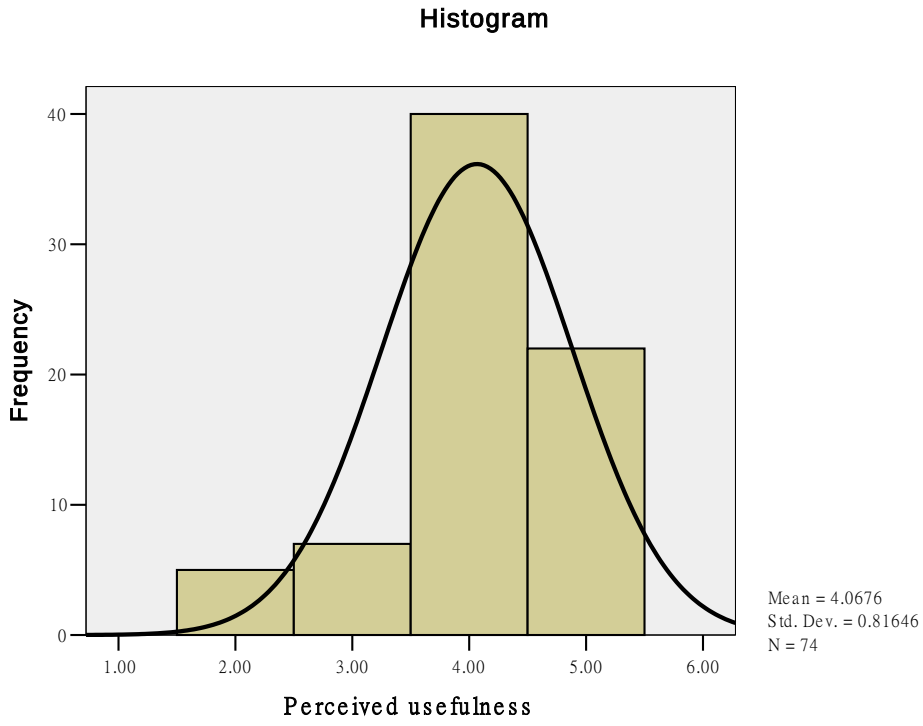
a) Perceived ease of use



The evaluation of the frequency table shows that the average response for perceived ease of use is almost 4. It is therefore clear that online shoppers' overall attitude towards ease of purchasing goods or services online is at a positively high level, which is close to the level of agreement (4). Even with a positive standard deviation level of 0.8, the attitude towards perceived ease of using online shops is not very low. The most frequently appeared response

for the perceived ease of use is 4, with about 55.4% of respondents selecting the statement level of 4 (agree), followed by 25.7% respondents selecting the statement level of 5 (strongly agree). This means that most respondents agree with the statement of saying 'Online shopping makes my shopping easy', and do not see using online stores as a problem. However, 10.8% of indifference attitude implies that there is a room for improvement in terms of making user friendly or easy to use online stores.

b) Perceived usefulness



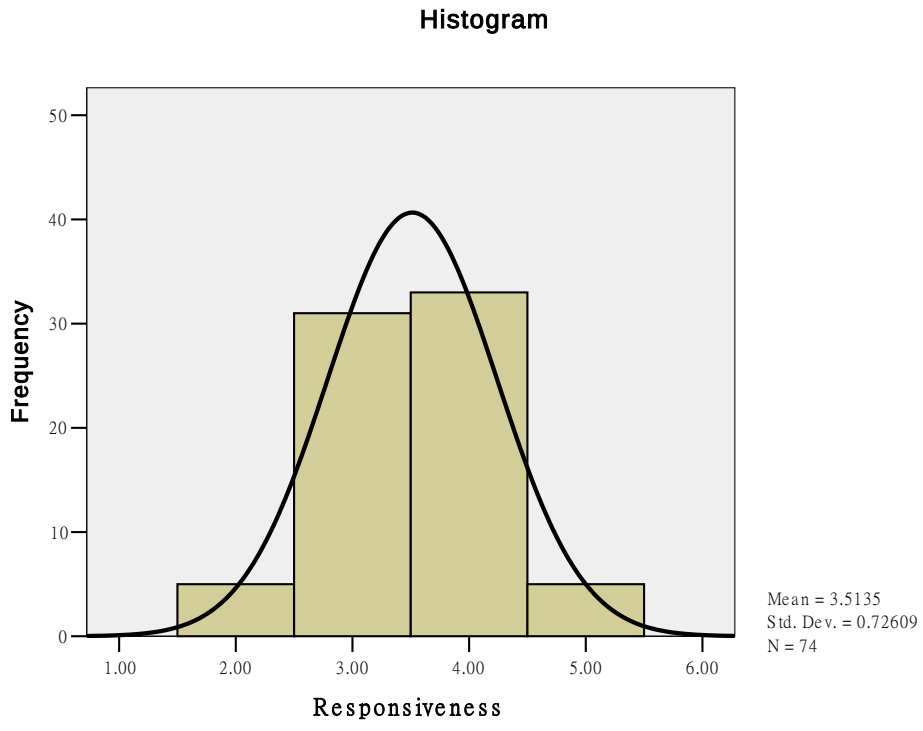
For the following variable, perceived usefulness, the average response is around 4.1, which is a bit above the level of agreement (4). The online shoppers' overall attitude towards usefulness of purchasing goods or services online is at positive level with standard deviation of 0.8, which is same as standard deviation of perceived ease of use. Most frequently appeared response for the perceived ease of use is 4, and 54.1% of respondents were agreed on the statement and 29.7% were strongly agreed in terms of the usefulness of online shopping. This means that most respondents supported the statement of saying 'I find online

stores useful', and they perceived the usefulness of online shopping. As it is said in the theory, this result indicates that people who agreed on the ease of use of online stores also tend to agree on the usefulness of the online stores, since in both variables the agreement level is around 4 (agree) with same standard deviation. However, 9.5% of indifference attitude implies that there is a room for improvement in terms of creating more useful online stores for customers' benefit.

From the histograms it can be seen that these two variables are roughly normally distributed and with bigger sample size they will follow normal distribution. Thus these data can be utilized with other statistical analysis such as regression or ANCOVA, which requires assumption of normally distributed dependent and independent variables.

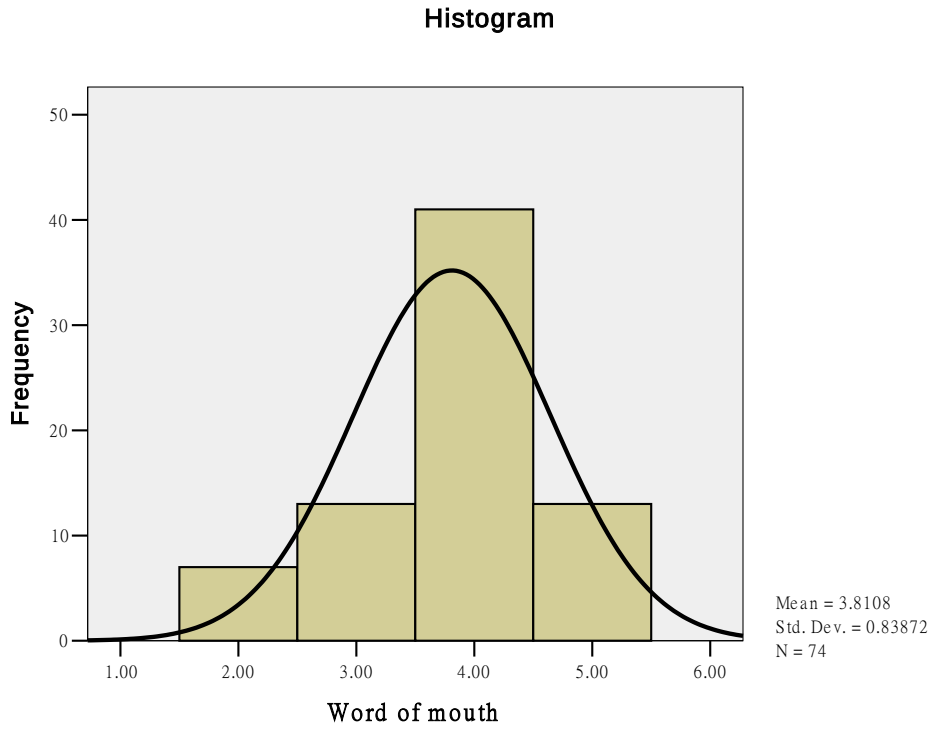
2. Interactivity

a) Responsiveness



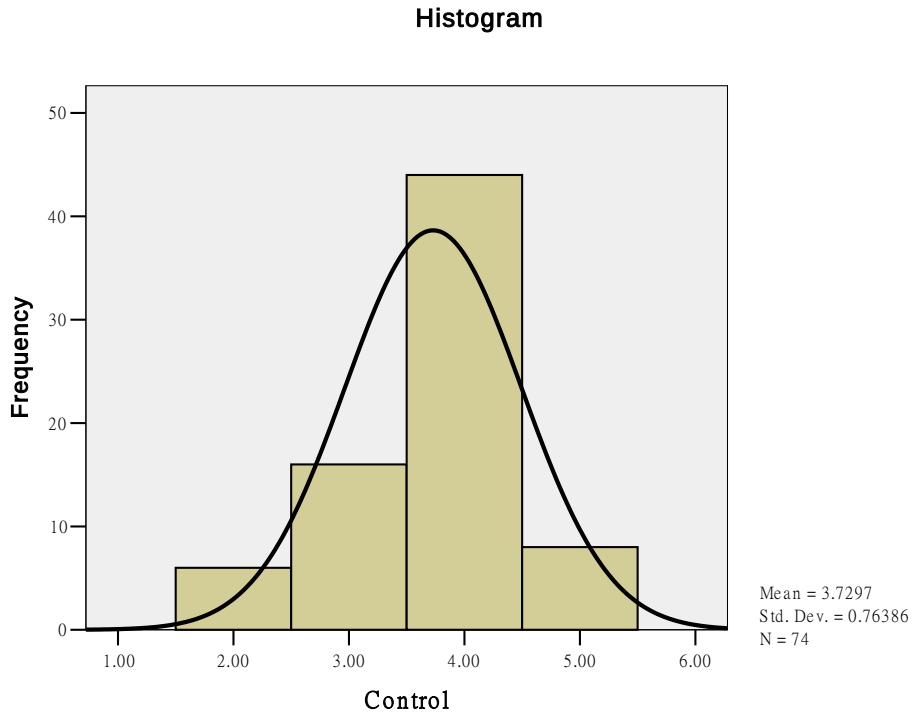
From the analysis of Responsiveness, it can be seen that the average response is around 3.5 which is in between level of agreement (4) and neutral (3). Comparatively lower level of agreement indicates that people's views on the responsiveness of online stores are moderately positive in general, with standard deviation of 0.7. Most frequently appeared responses for the responsiveness is 4 and 3, with 44.6% of respondents agreed on the statement, and 41.9% neither agreed nor disagreed with it. This means that although more respondents supported the statement of saying 'I think online stores provide prompt service', a large proportion of indifference attitude shows that those services provided by online stores are not frequent or quick enough, and online customers expect better or faster services from online stores due to the development of internet and computer technology. About 41.9% of people are yet to be impressed further through improved services.

b) Word of mouth



From the analysis of Word of Mouth, it can be seen that the average response is around 3.8 which is quite close to the level of agreement (4). The online shoppers' overall attitude towards others' opinions when purchasing goods or services online is at positively high level with standard deviation of 0.8. Most frequently appeared response for the WOM is 4, and 55.4% of respondents were agreed on the statement while 17.6% were either strongly agreed or neutral with regard to WOM. This means that most respondents supported the statement of saying 'When I make a purchase, opinions of people that I know are important to me', and they care about what others think about the products or services of online stores. However, 17.6% of indifference attitude implies that for those customers, opinions of others' might be important according to the certain types of products or occasions instead of in every single purchase.

c) Control



The analysis of Control shows that the average response is around 3.7, which is not far away from the level of agreement (4). The online shoppers' overall attitude towards their control

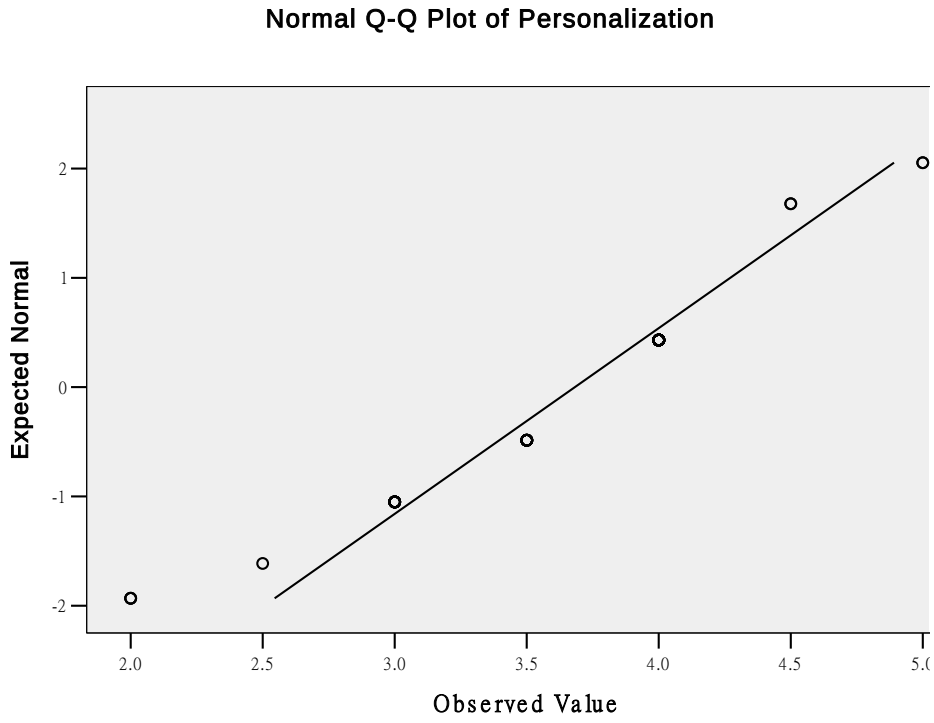
and bargaining power over purchasing goods or services online is at a relatively positive level with a standard deviation of close to 0.8. The most frequently appeared response for control is 4, with 59.5% of respondents agreed on the statement and 10.8% strongly agreed in terms of availability of information about products and services. This means that most respondents supported the statement of saying 'All necessary resources such as product information, customer reviews or ratings are accessible to me', and as Javadi et al. (2012) argued, Internet has shifted the balance of power in favor of consumers instead of marketers. However, 21.6% of indifference attitude indicates that there still is a room for improvement in terms of allowing customers to have more control over their online shopping process as it becomes very easy for them to utilize online shopping.

From the histograms it can be seen that all three variables are roughly normally distributed and with a bigger sample size they will follow normal distribution. Thus these data can be utilized with other statistical analysis such as regression or ANCOVA.

d) Personalization

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Personalization	74	3.00	2.00	5.00	3.6824	.58856
Valid N (listwise)	74					



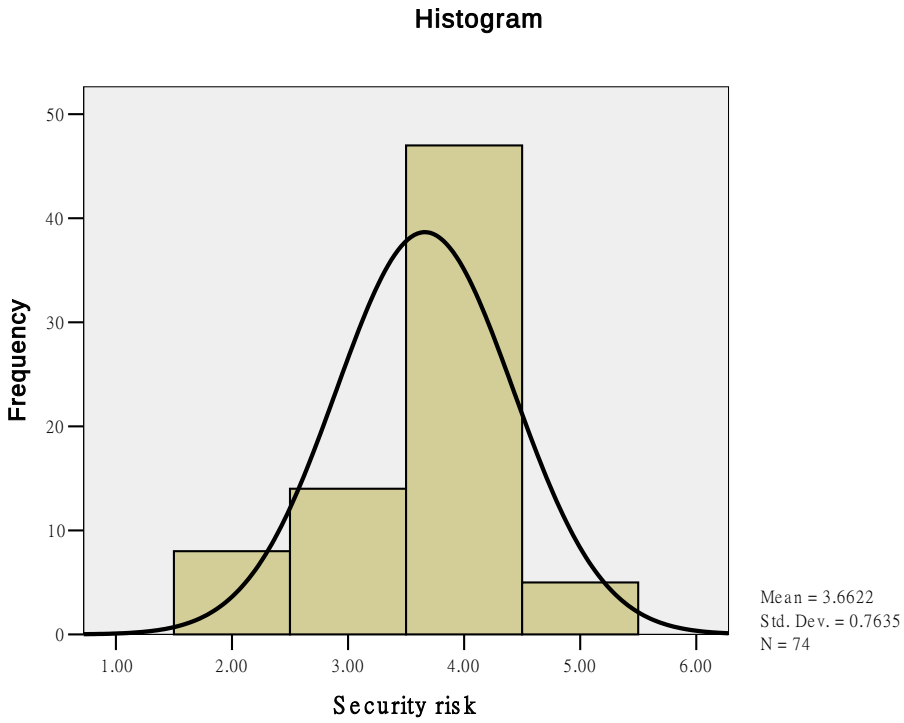
From the output of descriptive analysis of personalization, it can be seen that the average response is around 3.7, which is not far away from the level of agreement (4). The online shoppers' overall attitude towards level of personalization presented in three scenarios is at a relatively positive level with a standard deviation of close to 0.6. This average response of 3.7 consists of three different levels of personalization, which are individual personalization, mass personalization and low personalization. Since the study of average response on total level does not give us much insight about effect of different personalization levels on other variables, further analysis is needed to be done to identify the difference among those three levels and to exploit the effect of three levels of personalization.

In the normal probability plot (Normal Q-Q Plot), the observed value for each response is plotted against the expected value from the normal distribution. A reasonably straight line suggests that the variable personalization appears to be reasonably normally distributed and with a bigger sample size it will follow normal distribution. Thus it can be utilized with other

statistical analysis such as ANOVA or ANCOVA, which requires assumption of normally distributed dependent and independent variables.

3. Perceived risk

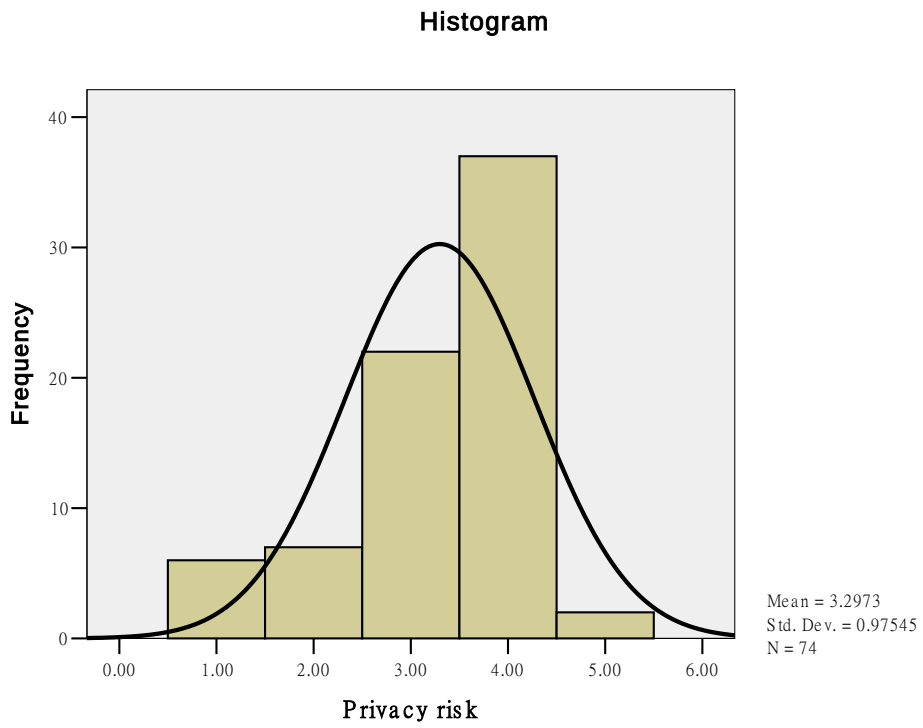
a) Security risk



The analysis of Security risk shows that the average response is around 3.7, which is not far away from the level of agreement (4). The online shoppers' overall attitude towards security risk, such as credit card risk involved in online shopping, is at a relatively high level which is a positive attitude in this case, with standard deviation of close to 0.8. Most frequently appeared response for this risk variable is 4, with 63.5% of respondents agreed on the statement and 6.8% were strongly agreed in terms of their security safety when using online shopping. This means that most respondents supported the statement of saying 'It is safe to

use credit cards when shopping online', and do not bother revealing their credit cards for online shopping. However, 18.9% of indifference attitude indicates that there are still quite many customers who are not completely sure about their security safety and there is a room for improvement to secure customers' credit card safety.

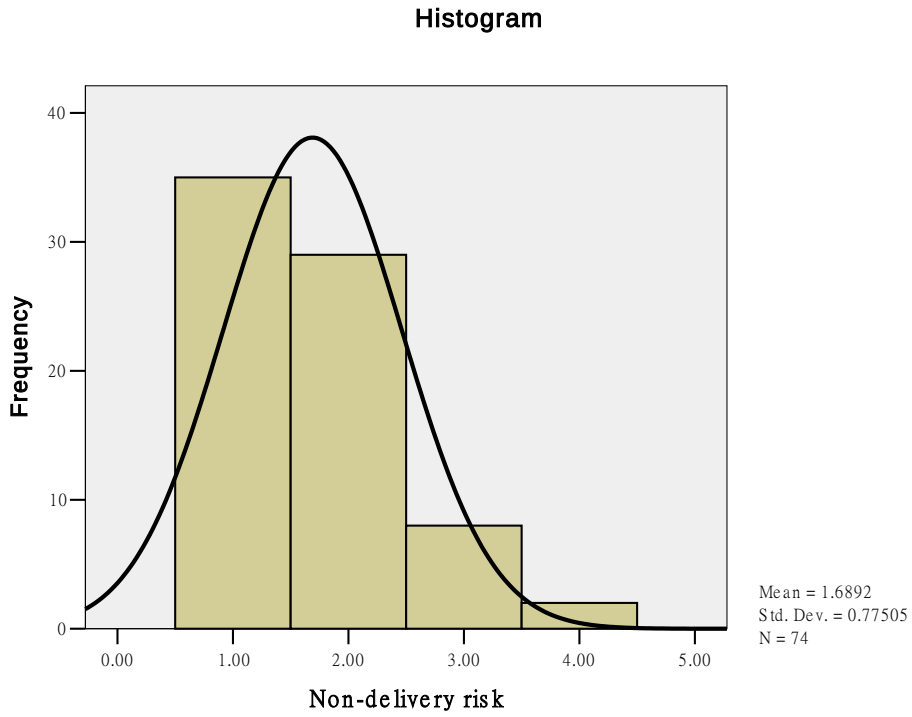
b) Privacy risk



The analysis of Privacy risk shows that the average response is around 3.3, which is not far away from the level of neutral (3). The online shoppers' overall attitude towards privacy risk, such as personal information which can be revealed in online shopping, is at quite moderate level which is a relatively positive attitude, with standard deviation of close to 1. This high standard deviation indicates that people’s views deviate a lot from this average conclusion and it was difficult to reach a consensus. Most frequently appeared response for this risk variable is 4, with half of respondents agreed on the statement and 2.7% were strongly agreed in terms of the privacy risk they have to face when using online stores. This means that most respondents supported the statement of saying 'My personal information is treated

confidential by online stores', and think their personal information is treated safely by online stores and are less concerned about the exposure of their privacy. However, 29.7% of indifference attitude indicates that there are still many customers who are concerned about their privacy risk and there is a room for improvement to prevent customers' personal information from being illegally used by other unrelated parties.

c) Non-delivery risk



The analysis of Non-delivery risk shows that the average response is around 1.7 which is not far away from the level of disagreement (2). The online shoppers' overall attitude towards non-delivery risk, such as not being able to receive what they have ordered, is at a quite low level which is a positive attitude as well in this case, with standard deviation of close to 0.8. Most frequently appeared response for this risk variable is 1, with 47.3% of respondents strongly disagreed on the statement and 39.2% disagreed in terms of the non-delivery risk they have to face when using online shopping. This means that most respondents disagreed on the statement of saying 'I often do not receive the product ordered online', and most of the

time online stores successfully deliver their products to customers. However, 10.8% of indifference attitude indicates that there are still quite many customers who are not happy with delivery of their ordered products by online retailers and there is a room for improvement to make sure customers receive what they have ordered within a certain time frame.

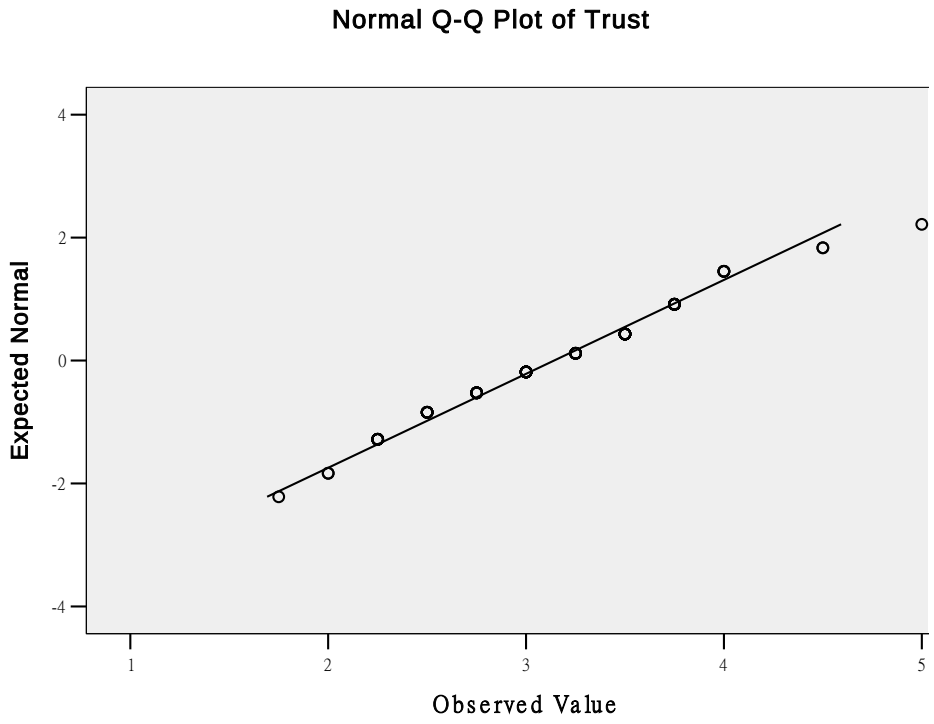
From the histograms it can be seen that all three risk factors are roughly normally distributed and with bigger sample size they will follow normal distribution. Thus these data can be utilized with other statistical analysis such as regression or ANCOVA.

4.1.3 Dependent variables

1. Trust

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Trust	74	3.25	1.75	5.00	3.1419	.65439
Valid N (listwise)	74					

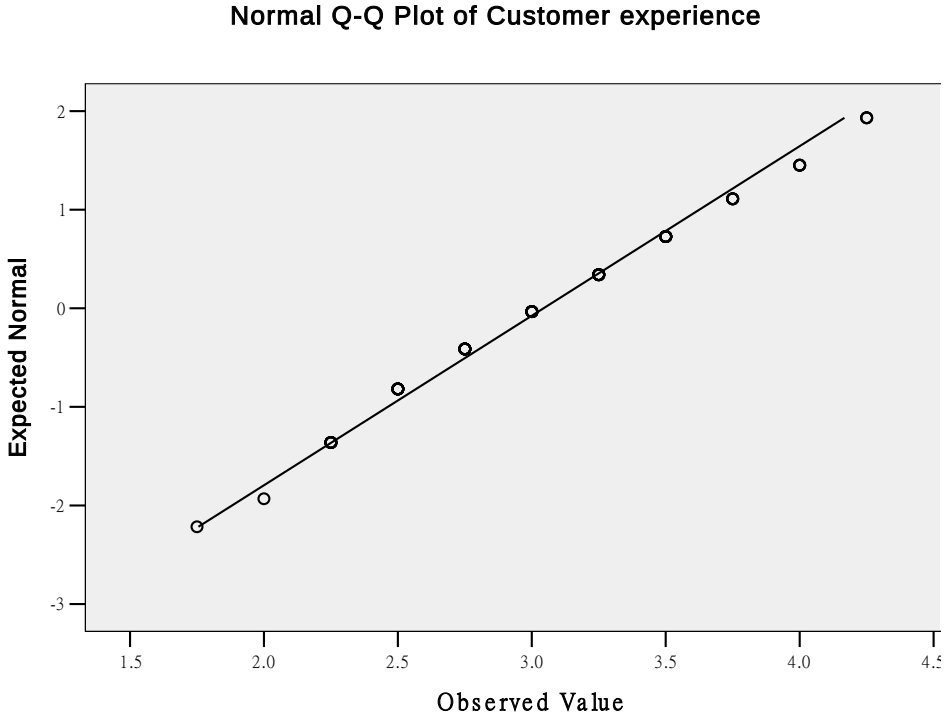


From the output of descriptive analysis of Trust, it can be seen that the average response is around 3.1, which is not far away from the level of neutral (3). In comparison with physical stores, the customers' overall attitude of trust towards online stores is at moderate level with standard deviation of close to 0.7. It means that overall, online stores are not generating higher trust levels among customers than physical shops do. However, this average response of 3.1 consists of trust levels in three different scenarios with features of individual personalization, mass personalization and low personalization, respectively. Since the study of average response on total trust level does not give us much insight about effect of different personalization levels on trust, further analysis is needed to be done to identify the difference among those trust levels under three scenarios and further exploit the effect of trust on customer experience.

2. Customer experience

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Customer experience	74	2.50	1.75	4.25	3.0439	.58133
Valid N (listwise)	74					

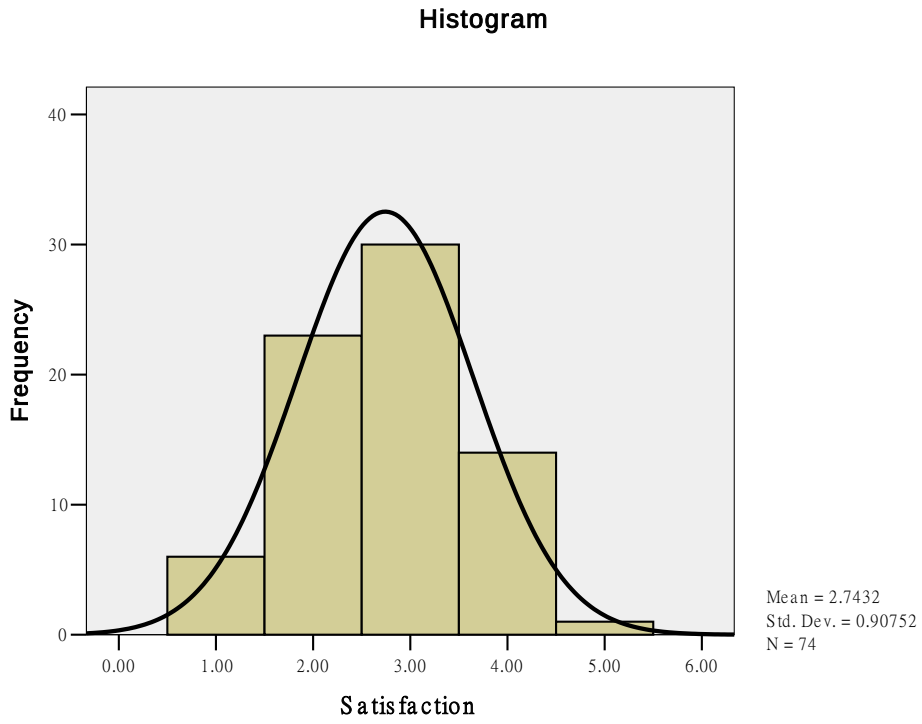


From the output of descriptive analysis of Customer experience, it can be seen that the average response is around 3.0, which is right on the level of neutral (3). In comparison with physical shops, the respondents' overall attitude towards their shopping experience with online stores is at a neutral level with a standard deviation of close to 0.6. Medium levels of customer experience scores can be expected from the level of trust in previous analysis, according to the theory of relationship between these two variables. This average response of

3.0 consists of customer experience levels in three different scenarios as mentioned above. In order to see whether there is any difference between customer online experience within different online stores described in three scenarios, and the effect of different trust levels on customer experience, further analysis is yet to be done to identify the difference in customer experience among those scenarios and to further exploit the effect of customer experience on customer satisfaction.

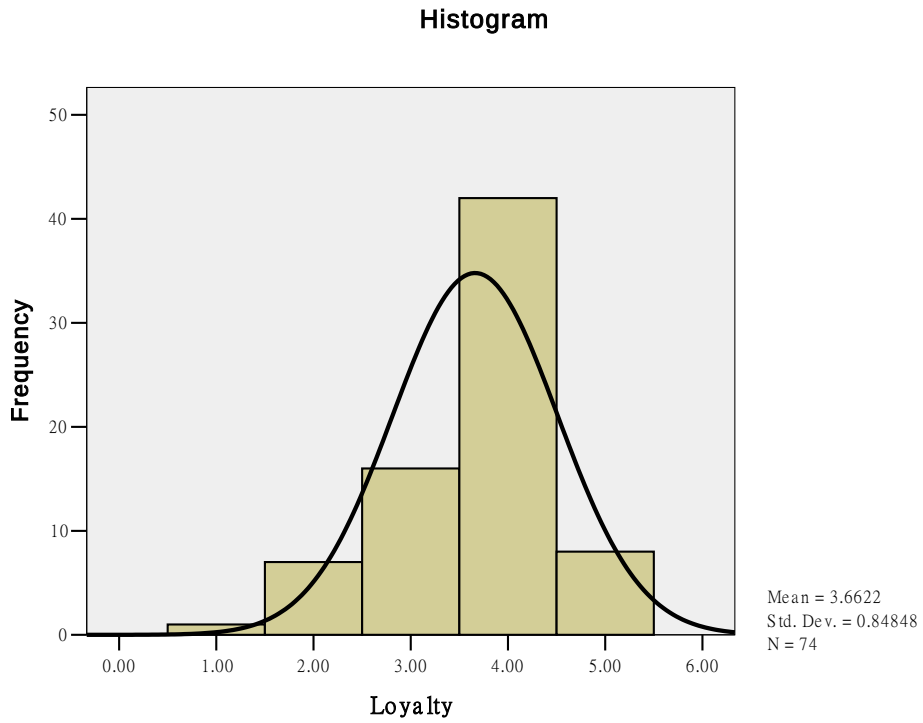
In the normal probability plot (Normal Q-Q Plot), the observed value for each response is plotted against the expected value from the normal distribution. A reasonably straight line suggests that the variable trust and customer experience appear to be reasonably normally distributed and with bigger sample size it will follow normal distribution. Thus it can be utilized with other statistical analysis such as ANOVA or ANCOVA.

3. Satisfaction



The analysis of Satisfaction shows that the average response is around 2.7, which is lower than the level of neutral (3). The online shoppers' overall satisfaction level with online shopping is at a relatively low level which is a negative attitude, with a standard deviation of close to 0.9. The most frequently appeared response for the satisfaction variable is 3, with 40.5% of respondents neither agreed nor disagreed on the statement and 31.1% were disagreed with regard to satisfaction in comparison with using physical shops. Overall, only 20.3% of people are more satisfied with online stores than physical shops in general. It might be led by relatively low customer experience level, which is mentioned above. This average response of 2.7 consists of customer satisfaction levels in three different scenarios as well and in order to see whether there is any difference between customer satisfaction in different online stores described in three scenarios, and to see the effect of different customer experience levels on customer satisfaction, further analysis is needed to be done to identify the difference among three scenarios and to further exploit the effect of satisfaction on loyalty.

4. Loyalty



The output of frequency analysis shows that the average response is around 3.7, which is close to the level of agreement (4). The online shoppers' overall loyalty level in online shopping is at a moderately high level which is a positive attitude, with standard deviation of close to 0.8. The most frequently appeared response for the loyalty variable is 4, with 56.8% of respondents agreed on the statement and 21.6% were neither agreed nor disagreed with regard to the loyalty in comparison with using physical shops. Overall, about 67.6% of people are more loyal to online stores than physical shops in general. Despite low levels of satisfaction as observed above, this moderately high loyalty level indicates that there are other factors that affect customer loyalty attitudes besides satisfaction. As we know, this average response of 3.7 consists of customer loyalty levels within three different scenarios with features of individual personalization, mass personalization and low personalization, respectively. In order to see whether there is any difference between customers' loyalty within different online stores described in three scenarios, further analysis is needed to be done to identify the effect of customer satisfaction on customer loyalty levels under three scenarios.

From the histograms, it can be seen that satisfaction and loyalty are roughly normally distributed and with a bigger sample size they will follow normal distribution. Thus these data can be utilized with other statistical analysis such as ANOVA or ANCOVA.

4.2 ANOVA analysis

In order to compare the mean scores of more than two groups, analysis of variance (ANOVA) is used to compare the variance between the different groups (based on personalization in this case). In this study, between-groups ANOVA is used since I have different participants or cases in each of three groups.

Considering that personalization is the only variable manipulated in this study, here we mainly discuss about the variance of personalization within three scenarios and other dependent variables that are assumed to be affected by personalization.

4.2.1 Difference of Personalization among scenarios

One-way between-groups ANOVA

One-way between-groups ANOVA can be used when I have one independent variable (personalization) with three or more levels and one dependent continuous variable (trust/customer experience/satisfaction/loyalty). ANOVA will tell us whether there are significant differences in the mean scores on the dependent variable across the three groups (Pallant 2011).

Descriptives

Personalization

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Scenario 1	26	3.8846	.43146	.08462	3.7103	4.0589	3.00	5.00
Scenario 2	23	3.7609	.49703	.10364	3.5459	3.9758	3.00	5.00
Scenario 3	25	3.4000	.70711	.14142	3.1081	3.6919	2.00	4.00
Total	74	3.6824	.58856	.06842	3.5461	3.8188	2.00	5.00

This table gives information about mean score of personalization in each group. As we can see, the variable personalization scored the highest (3.9) in the first scenario which is individual personalization, followed by scenario 2 (mass personalization) and scenario 3 (low personalization) which scored the lowest, with a mean score of 3.8 and 3.4, respectively. A difference can be observed between scenarios in terms of personalization as expected. Treating each customer differently is perceived as the highest level of personalization (individual personalization) while treating each group of people as one unit

is considered a lower level of personalization (mass personalization), but still higher than the low level of personalization in scenario 3.

ANOVA

Personalization

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.199	2	1.599	5.141	.008
Within Groups	22.089	71	.311		
Total	25.287	73			

This table tells us that the difference among three different groups is statistically significant, since the P value is 0.008<0.05 (the significance level). However, it is not clear where the difference actually lies. Further investigation is required to exploit the existence of difference.

One-way between-groups ANOVA with planned comparisons

In the analysis provided above, scores of personalization are compared across each of the three groups. Tables below show the comparison of scenario 1 and 2, which are considered to be high level personalization, with scenario 3 which is considered as low level personalization.

Contrast Coefficients

	Scenario		
Contrast	Scenario 1	Scenario 2	Scenario 3
1	-1	-1	2

Contrast Tests

		Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
Personalization	Assume equal variances	1	-.8455	.27435	-3.082	71	.003
	Does not assume equal	1	-.8455	.31289	-2.702	34.985	.011

The Sig. level for the contrast that we specified is 0.003 under assumption of equal variances, and is 0.11 under assumption of unequal variances. In both cases, the Sig. level is less than 0.05, so we can conclude that there is a statistically significant difference between scenario 3 (low level group) and the other two scenarios (high level group). In order to identify the difference more precisely, Post Hoc test is conducted to see which scenario is different from the other.

Post Hoc Test

Multiple Comparisons

Dependent Variable: Personalization

Tukey HSD

(I) Scenario	(J) Scenario	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Scenario 1	Scenario 2	.12375	.15966	.719	-.2585	.5060
	Scenario 3	.48462*	.15624	.008	.1106	.8586
Scenario 2	Scenario 1	-.12375	.15966	.719	-.5060	.2585
	Scenario 3	.36087	.16115	.072	-.0249	.7466
Scenario 3	Scenario 1	-.48462*	.15624	.008	-.8586	-.1106
	Scenario 2	-.36087	.16115	.072	-.7466	.0249

*. The mean difference is significant at the .05 level.

From the table, it is clear that at a 5% significance level, the significant difference lies between scenario 1 (individual personalization) and scenario 3 (low personalization). There is no significant difference between scenario 2 (mass personalization) and scenario 1 (individual personalization) or scenario 3 (low personalization). It means that individual personalization is significantly different from low personalization while mass personalization is not significantly different from individual or low personalization. However, mass personalization does significantly differ from low personalization at a significance level of 10%, since Sig. value 0.072<0.1. Online retailers aiming for high levels of personalization thus need to differentiate themselves by creating individualized personalization or mass personalization, but individual personalization might work better than mass personalization.

Altogether, the experiment of aiming at presenting different levels of personalization to respondents worked quite well by differentiating high level and low level personalization significantly, and now we can look at how this difference affects other variables such as trust, customer experience, satisfaction and loyalty.

4.2.2 Difference in Trust

A one-way between-groups analysis of variance was conducted to explore the impact of personalization on trust. Participants were divided into three groups according to their exposure to the scenarios (Group 1: scenario 1; Group 2: scenario 2; Group 3: scenario 3).

Descriptives

Trust

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Scenario 1	26	3.2212	.64547	.12659	2.9604	3.4819	2.00	4.50
Scenario 2	23	3.1304	.62554	.13043	2.8599	3.4009	2.25	4.50
Scenario 3	25	3.0700	.70534	.14107	2.7789	3.3611	1.75	5.00
Total	74	3.1419	.65439	.07607	2.9903	3.2935	1.75	5.00

This table gives information about the mean score of trust in each group. As we can see the variable trust scored the highest (3.2) in the first scenario which is individual personalization, followed by scenario 2 (mass personalization) and scenario 3 (low personalization) that scored lower, with mean scores of 3.1 and 3.0, respectively. A slight difference can be observed between scores in terms of customers' trust level in online stores compared with physical shops. It means that compared to physical shops, people trust a little bit more in online stores with features of individual personalization than with mass personalization or low personalization.

ANOVA

Trust

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.296	2	.148	.339	.714
Within Groups	30.965	71	.436		
Total	31.260	73			

This table tells us that the difference among three different groups is statistically insignificant, since the P value is 0.714>0.05 (at 5% significance level). It means that although there is difference between groups in terms of trust, this difference is not significant enough and thus personalization has no significant effect on level of trust. This result goes against what Bragge et al. (n.d.) argued, that personalization is the main tool of convincing customers to purchase.

4.2.3 Difference in Customer experience

A one-way between-groups analysis of variance was conducted to explore the impact of personalization on customer experience.

Descriptives

Customer experience

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Scenario 1	26	3.0577	.64151	.12581	2.7986	3.3168	1.75	4.25
Scenario 2	23	2.9891	.49128	.10244	2.7767	3.2016	2.25	3.75
Scenario 3	25	3.0800	.61118	.12224	2.8277	3.3323	2.00	4.25
Total	74	3.0439	.58133	.06758	2.9092	3.1786	1.75	4.25

This table gives information about mean score of customer experience in each group. As we can see, customer experience scored the highest (3.1) in the third scenario which is low personalization, followed by scenario 1 (individual personalization) and scenario 2 (mass personalization) which has the lowest score, with mean scores of 3.1 and 3.0, respectively. A minor difference can be observed between scores in terms of customer experience level in online stores compared with physical shops. It means that compared to physical shops, customer experience on online stores is not much superior and online stores with features of

individual personalization or low personalization generate better customer experience than those with mass personalization.

ANOVA

Customer experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.107	2	.053	.154	.858
Within Groups	24.563	71	.346		
Total	24.670	73			

This table tells us that at the 5% significance level, there is no statistically significant difference in customer experience scores for the three different groups. The difference among three different groups is statistically insignificant, with the Sig. value of 0.858>0.05. It means that although there is difference between groups in terms of customer experience, this difference is not significant enough and thus personalization has no significant effect on the level of customer experience. This can also follow from the result of the previous test on trust, since according to the theory customer experience is affected by trust.

4.2.4 Difference in Satisfaction

A one-way between-groups analysis of variance was conducted to explore the impact of personalization on satisfaction.

Descriptives

Satisfaction

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Scenario 1	26	2.6538	.89184	.17490	2.2936	3.0141	1.00	4.00
Scenario 2	23	2.8261	.77765	.16215	2.4898	3.1624	1.00	4.00
Scenario 3	25	2.7600	1.05198	.21040	2.3258	3.1942	1.00	5.00
Total	74	2.7432	.90752	.10550	2.5330	2.9535	1.00	5.00

This table gives information about the mean score of satisfaction in each group. As we can see that variable satisfaction scored the highest (2.8) in the second scenario which is mass personalization, followed by scenario 3 (low personalization), and scenario 1 (individual personalization) which scored the lowest, with mean scores of 2.8 and 2.7, respectively. A minor difference can be observed between scenarios in terms of customer satisfaction levels in online stores compared with physical shops. It means that customer satisfaction on online stores is not much superior to the physical shops and online stores with features of mass personalization or low personalization generate better customer satisfaction than those with individual personalization.

ANOVA

Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.373	2	.186	.221	.802
Within Groups	59.749	71	.842		
Total	60.122	73			

This table tells us that at the 5% significance level, there is no statistically significant difference in customer satisfaction scores for the three different groups. The difference among three different groups is statistically insignificant, with the P value of 0.802>0.05. It means that although there is difference between groups in terms of customer satisfaction, this difference is not significant enough and thus personalization has no significant effect on level of customer satisfaction.

4.2.5 Difference in Loyalty

A one-way between-groups analysis of variance was conducted to explore the impact of personalization on loyalty.

Descriptives

Loyalty

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Scenario 1	26	3.8462	.96715	.18967	3.4555	4.2368	1.00	5.00
Scenario 2	23	3.5217	.73048	.15232	3.2059	3.8376	2.00	4.00
Scenario 3	25	3.6000	.81650	.16330	3.2630	3.9370	2.00	5.00
Total	74	3.6622	.84848	.09863	3.4656	3.8587	1.00	5.00

This table gives information about the mean score of customer loyalty in each group. As we can see the variable loyalty scored the highest (3.8) in the first scenario which is individual personalization, followed by scenario 3 (low personalization), and scenario 2 (mass personalization) which scored the lowest, with mean scores of 3.6 and 3.5, respectively. A slight difference can be observed between scenarios in terms of customer loyalty levels in online stores compared with physical shops. It means that compared to physical shops, customer loyalty to online stores is relatively higher and online stores with features of individual personalization or low personalization generate better loyalty levels than those with mass personalization.

ANOVA

Loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.430	2	.715	.993	.375
Within Groups	51.124	71	.720		
Total	52.554	73			

This table tells us that at a 5% significance level, there is no statistically significant difference in customer loyalty scores of the three different groups. The difference among three different groups is statistically insignificant, with the P value of 0.375>0.05. It means that although there is difference between groups in terms of customer loyalty, this difference is not significant enough and thus personalization has no significant effect on level of customer loyalty.

4.3 ANCOVA analysis

Through ANOVA analysis, no statistically significant difference is found between the three groups regarding the variables: trust, customer experience, satisfaction or loyalty. Thus ANCOVA analysis is conducted for further investigation. Analysis of covariance is an extension of analysis of variance which allows us to explore differences between groups while statistically controlling for additional (continuous) variables (Pallant 2011). It can be seen from the conceptual model that only trust as a dependent variable, has several antecedents that can be correlated to personalization and trust itself.

One-way ANCOVA of trust

The additional variable (called a covariate) is a variable that is assumed to be influential to scores on the dependent variable (Pallant 2011). According to the theoretical model, potential covariates of personalization are convenience (perceived ease of use & perceived usefulness), responsiveness, WOM, control and three risk factors such as privacy risk, security risk and non-delivery risk. The variables that are chosen as covariates should be continuous variables, measured reliably, and should correlate significantly with the dependent variable (Pallant 2011). Correlation analysis is done to identify the relationship between each variable and the dependent variable -- trust. Perceived ease of use, responsiveness and privacy risk are those variables that are mostly correlated with trust, with correlation coefficient of 0.379**, 0.356** and 0.335**, respectively. (See appendix 1).

ANCOVA analysis is done for the variable trust by first controlling all relevant covariates, and second, only with most significantly correlated covariates.

1. With all possible covariates

Tests of Between-Subjects Effects

Dependent Variable: Trust

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	12.242[a]	10	1.224	4.056	.000	.392
Intercept	.013	1	.013	.045	.834	.001
Use	.077	1	.077	.257	.614	.004
Ease	1.497	1	1.497	4.958	.030	.073
Resp	.998	1	.998	3.306	.074	.050
WOM	.030	1	.030	.100	.753	.002
Control	.702	1	.702	2.326	.132	.036
Sec	.471	1	.471	1.560	.216	.024
Priv	3.496	1	3.496	11.580	.001	.155
Ndeliv	.493	1	.493	1.634	.206	.025
Scen	1.243	2	.621	2.059	.136	.061
Error	19.018	63	.302			
Total	761.750	74				
Corrected Total	31.260	73				

a. R Squared = .392 (Adjusted R Squared = .295)

After controlling all relevant covariates, the effect of Scen on trust is insignificant with Sig. value of 0.136<0.05, in other words, there is no significant effect of personalization on trust levels. There is no significant difference in the trust scores for participants in three groups after controlling for other independent variables.

2. With only significantly correlated covariates

Tests of Between-Subjects Effects

Dependent Variable: Trust

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	10.681[a]	5	2.136	7.059	.000	.342
Intercept	.641	1	.641	2.118	.150	.030
Ease	1.986	1	1.986	6.564	.013	.088
Resp	1.782	1	1.782	5.888	.018	.080
Priv	3.303	1	3.303	10.913	.002	.138
Scen	1.638	2	.819	2.707	.074	.074
Error	20.579	68	.303			
Total	761.750	74				
Corrected Total	31.260	73				

a. R Squared = .342 (Adjusted R Squared = .293)

In this case the significant value for scenario is 0.074, which is greater than 0.05 but smaller than 0.1. It means that at significant level of 10%, the result is significant and there is a significant difference in the trust scores for respondents in the different scenario groups after controlling for scores on the perceived ease of use, responsiveness and privacy risk. Thus personalization has a significant effect on trust only when its covariates such as perceived ease of use, responsiveness and privacy risk are controlled. Without such controlling, there is no difference between groups in terms of trust as we found from ANOVA analysis above or post hoc test below. The possible reason for this result is that those three covariates are related to the personalization to some extent, and since they have direct or indirect effect on trust, when there is no control of these variables, the personalization picks up effect of its covariates on trust, thus making the difference between effect on three trust levels similar or unclear. For example, assume individual personalization and low personalization each has effect of 3 and 2 on trust level. It is possible that individual personalization can induce higher level of privacy risk, since it demands more personal information from customers, and thus effect of privacy risk on trust could be 1 in case of individual personalization, while the effect could be 2 for the low personalization case. In total, trust received effect of 4 from both cases. However, when there is controlling, the difference becomes clear and the effect is tested as being significant.

Post Hoc Test

Multiple Comparisons

Dependent Variable: Trust

Tukey HSD

(I) Scenario	(J) Scenario	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Scenario 1	Scenario 2	.0907	.18904	.881	-.3618	.5432
	Scenario 3	.1512	.18498	.694	-.2917	.5940
Scenario 2	Scenario 1	-.0907	.18904	.881	-.5432	.3618
	Scenario 3	.0604	.19081	.946	-.3963	.5172
Scenario 3	Scenario 1	-.1512	.18498	.694	-.5940	.2917
	Scenario 2	-.0604	.19081	.946	-.5172	.3963

Based on observed means.

4.4 Regression analysis

In order to identify what factors affect customer experience, regression is done for the dependent variable -- customer experience. From the tables below, we can find that the effect of trust on customer experience is significant in both cases of controlling and not controlling other variables, with Sig. values of 0.033<0.05 and 0.012<0.05, respectively. It means that trust is the main driver of customer experience, and to identify factors that attract online customers, it is necessary to see what factors affect the trust level of customers. It makes the whole analysis of trust that is done above reasonable since it helps us to find out factors that can affect customer experience through their effect on trust, namely perceived ease of use, responsiveness, privacy risk and personalization.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.310	.782		1.677	.099	-.251	2.872
	Trust	.274	.125	.308	2.184	.033	.023	.524
	Non-delivery risk	.125	.097	.167	1.292	.201	-.068	.319
	Privacy risk	-.004	.093	-.007	-.045	.964	-.190	.181
	Security risk	.027	.105	.035	.257	.798	-.182	.236
	Personalization	-.219	.121	-.221	-1.804	.076	-.461	.024
	Control	.027	.093	.036	.296	.768	-.158	.212
	Word of mouth	.129	.079	.186	1.632	.108	-.029	.286
	Responsiveness	.181	.112	.226	1.611	.112	-.043	.405
	Perceived usefulness	.197	.102	.276	1.939	.057	-.006	.400
	Perceived ease of use	-.162	.104	-.233	-1.550	.126	-.371	.047

a. Dependent Variable: Customer experience

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.236	.322		6.954	.000	1.595	2.877
	Trust	.257	.100	.289	2.566	.012	.057	.457

a. Dependent Variable: Customer experience

5. Conclusion

Online shopping is becoming more and more popular all over the world with increasing usage of Internet. Understanding customer's need for online shopping has become an important task for marketers. Especially understanding customer's attitudes towards online shopping, and improving customers' online shopping experience will help marketers to gain competitive advantages over their competitors. Therefore this study has focused mainly on the following research question: what are the unique experiences customers seek from online stores, in other words, what factors are attractive for online shoppers. The findings of this study will present a valuable picture to online retailers and help them understand the specific factors that influence customers to shop online, which can be implemented into their strategy making process.

The findings of this research can be summarized as below:

Firstly, starting from demographics, the majority of respondents are between 20~25 years old, with 63.5% of males and 36.5% of females. The average online purchasing frequency of people in this age group is around 1.2 times per month and it indicates that online retailers need to update their website information at least once in a month, and also take care of their customer data on a monthly basis. However, since it is not yet clear about the purchasing behavior of other groups of online shoppers, online retailers might need to make different strategies for different age brackets.

Secondly, regarding convenience factor, there is a positive relationship between perceived ease of use and perceived usefulness. More than 80% of respondents admitted the convenience of online shopping and positive correlation (0.379**) is observed between perceived ease of use and trust. Since trust is the main driver of customer experience, this positive correlation indicates that convenience can affect customer experience through trust,

which makes it an attractive factor for online shoppers, and thus online retailers need to present user friendly and useful websites to customers.

Thirdly, according to the result of this study, online stores are not providing prompt enough services for customers. Only 44.6% of respondents agreed that they are receiving quick responses from online stores. Positive correlation of 0.356** between responsiveness and trust means that if an online store can provide quick response services along with the information that are of customers' specific interests, more customers will tend to trust online stores and be willing to use online stores more often.

Fourthly, when engaged in online shopping, customers care about others' opinions and have a high level of control of their purchasing procedure in general. However, weak relationship is found between those variables (WOM and control) and trust. It indicates that although customers may require a certain level of WOM and control over their shopping procedure, they are not decisive factors that attract customers from physical shops to online stores. Increasing level of WOM or control will not affect customers' experience significantly.

Correlation analysis is also done between risk factors and trust to see the relationship between trust and perceived risk (security risk, privacy risk and non-delivery risk). The results shows that only privacy risk is significantly correlated (0.335**) with trust level, and thus online retailers need to put more effort into securing customers' privacy safety, in order to attract customers to online stores.

In addition, according to the analysis of variance, no significant difference is found between three scenario groups in terms of trust. It indicates that personalization has no significant effect on customers' trust level. This result goes against what Bragge et al. (n.d.) argued that personalization is the main tool of convincing customers to purchase. However, with control of covariates such as perceived ease of use, responsiveness and privacy risk, the effect of personalization became significant at Sig. level of 10%. It means that different levels of

personalization have different effects on trust and thus personalization is an attractive factor for online shoppers.

Furthermore, analysis of covariance tells us that although online stores with features of individual personalization or low personalization generate better customer experience than those with mass personalization, this difference is not significant enough and thus personalization has no significant direct effect on customer experience. This can also be derived from the previous studies which argued that customer experience is affected by trust. Analysis of covariance also tells us that personalization does not affect customer satisfaction or loyalty directly, either. It only significantly affects trust level and indirectly affects other dependent variables through trust.

Finally, regression analysis tells us that trust has a significant effect on customer experience and thus identifying factors affecting trust is important in order to improve or generate positive customer experience.

To sum up, factors that are important for online customers are perceived ease of use, responsiveness, privacy risk and personalization. Those factors are significantly related to customer trust and affects customer experience through trust, especially personalization. It is also found that personalization has a significant effect on trust when its covariates such as perceived ease of use, responsiveness and privacy risk are controlled. In this paper, personalization is measured by three levels. At significant level of 5%, individual personalization is significantly different from low personalization, while mass personalization is not significantly different from individual or low personalization. However, mass personalization does significantly differ from low personalization at significance level of 10%. It means that online retailers can differentiate themselves by creating individual personalization or mass personalization, but individual personalization might work better than mass personalization. Online retailers thus can utilize different personalization strategies to affect customer's trust level, but further studies will be required

to identify which level of personalization might be optimal for improving overall customer online experience.

6. Limitations

In this study, questionnaires are used as the main data gathering tool, and it is possible that the respondents may not answer the questions exactly according to what they think and how they behave. Because of constraints in time and resources, questionnaires are mainly distributed to the NHH students, and it is obvious that in other environments or even in other countries people have different characteristics and behaviors. Besides, most of my respondents are selected by using a convenience sampling method and the sample size (only 74 usable samples) was not large enough to represent the whole population. Then, the result of this study may have a lack of generalizability to other research settings. Another limitation might rise from the measurement of variables due to the reduced amount of questionnaire items and pre-tests. A sufficient number of question items will be optimal for measuring variables accurately and more subsequent pre-tests of those items will further assure the validity and reliability of the study.

There are several factors that have an effect on online shopping experience, but because of time constraint, in this study I didn't manipulate and examine all factors that are influencing online shopping experience. The selected variable for manipulation in this study is personalization and it is the only variable that is manipulated in this study. Multiple manipulations can be more precise and comprehensive in understanding how factors affect customer experience. The treatment of experiment is conducted in a way of presenting scenario text in this study, and better options might have been implemented, such as presenting a visualized website which can help induce respondents' feelings and thoughts better. In addition, since the assessment of the pre-test and post-test was conducted by the writer myself, it is unavoidable that a certain degree of subjectivity can be found in this study, and it would be more objective to be evaluated by two or three examiners.

In future studies, researchers can collect larger sample size and manipulate and examine other factors that are affecting online shopping experience to reach better results or

understanding. Extending this study to other countries and including cultural factors in the conceptual model could also show better dimension of online shoppers' attitude.

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8. Appendix 1

Correlation table

Correlations

		Perceived ease of use	Perceived usefulness	Responsiveness	Word of mouth	Control	Security risk	Privacy risk	Non-delivery risk	Trust
Perceived ease of use	Pearson Correlation	1	.563**	.463**	-.043	.144	.079	.055	-.282*	.379**
	Sig. (2-tailed)		.000	.000	.717	.220	.506	.639	.015	.001
	N	74	74	74	74	74	74	74	74	74
Perceived usefulness	Pearson Correlation	.563**	1	.357**	-.001	.161	.037	-.026	-.356**	.283*
	Sig. (2-tailed)	.000		.002	.993	.169	.754	.829	.002	.015
	N	74	74	74	74	74	74	74	74	74
Responsiveness	Pearson Correlation	.463**	.357**	1	.072	.352**	-.004	-.006	-.224	.356**
	Sig. (2-tailed)	.000	.002		.544	.002	.973	.961	.055	.002
	N	74	74	74	74	74	74	74	74	74
Word of mouth	Pearson Correlation	-.043	-.001	.072	1	.005	.006	-.181	.014	-.075
	Sig. (2-tailed)	.717	.993	.544		.969	.961	.122	.908	.524
	N	74	74	74	74	74	74	74	74	74
Control	Pearson Correlation	.144	.161	.352**	.005	1	.029	.036	-.190	.283*
	Sig. (2-tailed)	.220	.169	.002	.969		.805	.762	.105	.014
	N	74	74	74	74	74	74	74	74	74
Security risk	Pearson Correlation	.079	.037	-.004	.006	.029	1	.560**	-.110	.118
	Sig. (2-tailed)	.506	.754	.973	.961	.805		.000	.349	.317
	N	74	74	74	74	74	74	74	74	74
Privacy risk	Pearson Correlation	.055	-.026	-.006	-.181	.036	.560**	1	-.275*	.335**
	Sig. (2-tailed)	.639	.829	.961	.122	.762	.000		.018	.003
	N	74	74	74	74	74	74	74	74	74
Non-delivery risk	Pearson Correlation	-.282*	-.356**	-.224	.014	-.190	-.110	-.275*	1	-.128
	Sig. (2-tailed)	.015	.002	.055	.908	.105	.349	.018		.277
	N	74	74	74	74	74	74	74	74	74
Trust	Pearson Correlation	.379**	.283*	.356**	-.075	.283*	.118	.335**	-.128	1
	Sig. (2-tailed)	.001	.015	.002	.524	.014	.317	.003	.277	
	N	74	74	74	74	74	74	74	74	74

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

9. Appendix 2

Questionnaire

(Respondents are requested to read one of the scenarios presented to them and answer the following questions with options from strongly agree to strongly disagree on a Likert five-point scale)

Scenario 1

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic products) he used last time. Since he is a registered user, he is guided to his personal page called 'MY SITE' on the website, where the page display is based on his own recent navigation path. The computers on the page are of potential interest to Johnny himself. He proceeds to browse by using advanced search service where he can specify more detailed preferences. The system presents a summary of information of 5 computers, and he quickly locates the computer he wants. He puts the computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, system asks him if he wants to receive tailored recommendations or information about special promotions in the future. He selects 'yes' by specifying particular products he is interested in. Then he moves to his personal file page and adds the email address that he uses most frequently. He exits the system and rushes to the living room to watch a movie. A few days later, the online store sends Johnny a particular message to notify him that one of the products he specified is on sale. He likes it and wants to buy it soon.

Given such scenario, and combine with your own experience, please answer following questions regarding characteristics of online shopping.

❍ I have read the text

Scenario 2

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic products) he used last time. Johnny logs in and the page display is based on recent navigation paths of a group of individuals (including Johnny) who share common characteristics. The computers on the page are of potential interest to them. He proceeds to browse a few more pages for a while and finds the specific computer he wants. Then he puts the computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, the system asks him if he wants to receive recommendations or information about special promotions in the future. He selects 'yes' and then moves to his personal file page and adds the email address that he uses most frequently. He exits the system and rushes to the living room to watch some movies. A few days later, the online store sends out a particular common message to Johnny and a few others who have similar interests as Johnny. Johnny likes some of the products under recommendations.

Given such scenario, and combine with your own experience, please answer following questions regarding characteristics of online shopping.

❍ I have read the text

Scenario 3

Johnny wants to buy a new computer to replace his older one. He uses a search engine to find the online web store (that sells electronic product) he used last time. Since he is a registered user, he starts to look for products he wants. He looks on the main page and a lot of products and information are shown on top of the page, but he can't find the one he likes. He proceeds to browse many more pages for a long time and finds the specific computer he wants. Then he puts that computer in his shopping cart. He carefully examines shipping details and submits the order. He finds the selected computer is added in the order history list, and the status is described as 'in process'. After payment, the system sends him a confirmation email which starts with 'Dear customer, ... the payment is completed...' He exits

the system and rushes to the living room to watch some movies. A few days later, he checks the site again and finds that some products are on sale. He is interested in those products and wants to buy it.

Given such information, and imagine you are going to use this kind of online stores for your needs, please answer following questions regarding characteristics of online shopping.

- I have read the text

(Question part)

Q1 Online shopping makes my shopping easy

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q2 I find online stores useful

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q3 I think online stores provide prompt service

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q4 When I make a purchase, opinions of people that I know are important to me

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q5 All necessary resources such as product information, customer reviews or ratings are accessible to me

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q6 The online store provides recommendations that match Johnny's need

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q7 The online store provides relevant information for Johnny

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q8 It is safe to use credit cards when shopping online

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q9 My personal information is treated confidential by online stores

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q10 I often do not receive the product ordered online

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q11 As compared to physical stores, I think an online store like in the scenario can satisfy its customers better

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q12 As compared to physical stores, I can expect to be treated fairly by an online store like in the scenario

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q13 As compared to physical stores, I trust information from an online store like in the scenario

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q14 As compared to physical stores, I think an online store like in the scenario can be more trusted to keep its promises

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q15 As compared to physical stores, I think an online store like in the scenario can be more visually interesting

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q16 As compared to physical stores, I think an online store like in the scenario can induce more feelings and emotions (e.g. fun, intimacy, inspiration)

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q17 As compared to physical stores, I think an online store like in the scenario requires less physical actions and behaviors (e.g. site search, information search, chatting)

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q18 As compared to physical stores, shopping in an online store like in the scenario requires a lot of thinking

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q19 As compared to physical stores, I will be more satisfied with shopping experience from an online store like in the scenario

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Q20 I would consider purchasing products from the online store in the scenario

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Q21 Age

- <20
- 20-25
- 26-30
- >30

Q22 Gender

- Male
- Female

Q23 How often do you shop online? Please specify number of purchases (e.g. ___times per week/month)