Customer Perceived E-service Quality in Online Shopping

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Xi Zhang                                                    Yu Tang
Abstract

The advent of the Internet and e-commerce has brought a new way of marketing and selling many products. There are evidences indicating that the e-service quality is an essential strategy to a success, probably more important than a low price and a good web presence. The purpose of this thesis is to gain a better understanding of the e-service quality dimensions that affect the customer perceived e-service quality in online shopping. On the basis of a detailed literature review, a frame of reference was firstly developed. Then, five most important dimensions of the e-service quality, i.e. the website design, reliability, responsiveness, trust and personalization were selected out for exploring how these dimensions affect the customer perceived e-service quality in online shopping, which constitute the research questions of this thesis. After that, a qualitative research approach was used and the empirical data were gathered through open-end and focused interviews with four different kinds of customers to investigate the research questions. Moreover, data presentation and data analysis were conducted in accordance with the research questions and the frame of reference. Finally, the findings and conclusions were presented by answering the research questions, i.e. to describe how the website design, reliability, responsiveness, trust and personalization affect the customer perceived e-service quality and the implications for managements, theories and future researches are addressed. Throughout this study, some new factors of the dimensions and some new dimensions of the e-service quality are discovered.
Chapter 1 Introduction

With the rapid global development of the electronic commerce (e-commerce), more and more businesses are attempting to gain competitive advantages by using the e-commerce to interact with customers (Lee and Lin, 2005). Consequently, the competition among online retailers has become fiercer and fiercer (Yang et al., 2003). For example, more and more online companies publish the features and prices of their products in the advertising campaigns, so that customers can become well informed of the optimal prices when seeking products or services (Yang et al., 2004). In order to offset the price-transparency disadvantage, the competitors have utilized three primary strategies (Chen and Hitt, 2000): (1) geographic differentiations, (2) e-service quality differences, and (3) modest levers of switching costs. The growth of the online shopping has reduced the role of the physical geography for many consumers, and some implicit costs, such as those for the convenience and time utility, can also been shrunk by this geographical irrelevance. Therefore, the e-service quality differentiation has become the most important thing for attracting and retaining customers in the online shopping (Yang et al., 2004). Moreover, businesses with the experience and success using the e-commerce are becoming to more and more realize that the key determinants of the success or failure are not only the website presence and low price but also include the electronic service quality, i.e. e-service quality (Yang, 2001; Zeithaml, 2002; Wang, 2003). Zeithaml et al. (2000, p.11) presented the definition of the e-service quality. In their terms, the e-service quality was defined as “the extent to which a website facilitates efficient and effective shopping, purchasing, and delivering of products and services”. The e-service quality can not only potentially increase the attractiveness, hit rate, customer retention, and positive word-of-mouth, but also maximize the online competitive advantages of the e-commerce (Jessica, 2003). Therefore it is obvious that more attentions should be paid on the e-service quality (Yang, 2001; Janda et al., 2002; Zeithaml et al., 2002; Buckley, 2003; Wang, 2003; Yang et al., 2004). Moreover, the online shopping environment provides vast selection, information screening, reliability, and product comparison, which enable that consumers reduce the decision-making efforts (Alba et al., 1997). Thus, the e-service quality has become one of the key determinants of the success for online retailers (Jun, et al., 2004).

1.1 Background

In this section, the e-commerce, service quality, e-service quality, and e-service quality in online shopping will be addressed.

1.1.1 E-commerce

With the Internet users increasing and the network technologies rapid developing, the e-commerce is perceived as one of the most important applications of the computer and communication technologies (Manvi and Venkataram, 2005). According to Turban et al. (2002, p.4), “the E-commerce is an emerging concept that describes the process of buying, selling, or exchanging
products, services and information via computer networks, including the Internet.” The e-commerce, via the Internet, is completely revolutionizing business institutions, operations, products and services, as we have then known today, just as the telephone, television, fax and email have changed the way in which businesses and consumers communicate with each other (Wen et al., 2001).

It is expected that the projected value of the worldwide e-commerce will surge to US$ 5 trillions in 2005, up from US$ 345 billions in 2000 (Lever, 2001). The e-commerce promotes open communications and provides a virtual interactive environment where the suppliers and customers can exchange information and products (Gunasekaran and Nagai, 2005). In addition, the e-commerce allows both customers and suppliers to reduce the transaction costs significantly and enables information to reach more people without sacrificing the richness of the contents (Evans and Wurster, 1997). Finally, the e-commerce improves the communications among partners along a value chain and offers an integrated business model by which companies can be more responsive and flexible to the changing markets and customers’ requirements (Gunasekaran and Ngai, 2005). Actually, the e-commerce has become a part of our daily lives, and it is difficult to imagine an organization without any forms of e-commerce applications (Ibid).

In one word, E-commerce brings the benefits of the product promotions, cost savings, timely information, shortened remittance times, information consistencies, better customer services, better customer relationships, customizations of products, competitive advantages and conveniences of doing businesses (Gunasekaran and Ngai, 2005; Ngai and Wat, 2005).

1.1.2 Service Quality
The worldwide trend toward the service quality was first initiated in the 1880s when businesses realized that the quality product, in itself, was not guaranteed to maintain a competitive advantage (van der Wal et al., 2002). The market research has already shown that customers who are dissatisfied with a service will tell their experiences to more than three other people. Therefore, the potential customer will be reduced by the poor service (Horovitz, 1990). As the service becomes more and more important and the competition becomes fiercer and fiercer in an industry, both consumers and managers should pay special attentions to the service quality (Tai, 1994). The term “quality” is widely used as a measure of excellences (Madu & Madu, 2002). According to Parasuraman et al. (1985, p.42), Service quality can be defined as “the comparison between customers’ expectations and perceptions of services”. The term perception pertains to the consumers’ beliefs concerning the received or experienced service (Parasuraman et al., 1988; Brown and Swartz, 1989). It is believed that the perceived service quality contributes to positive business outcomes, such as greater levels of customer satisfactions, and by extension, favorable marketing behaviors, such as repurchases and positive word-of-mouth behaviors (Taylor and Hunter, 2002).

During the past three decades, a number of researchers have sought to discover the attributes of
the services, which contribute most significantly to relevant quality assessments (Gronroos, 1983; Parasuraman et al., 1985; Pitt et al., 1999). Among them, the work conducted by Parasuraman et al. (1985) has been regarded as the most prominent, which reveals ten dimensions of the service quality: (1) tangibles; (2) reliability; (3) responsiveness; (4) communication; (5) credibility; (6) security; (7) competence; (8) courtesy; (9) understanding the customer; and (10) access. Detailed explanations are described in Table 1.

Table 1: Dimensions of Service Quality

<table>
<thead>
<tr>
<th>Service Quality Dimensions</th>
<th>Measurement Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>It means that the firm performs the service right at the first time. It also means that the firm honors its promises</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>It concerns the willingness or readiness of employees to provide services</td>
</tr>
<tr>
<td>Competence</td>
<td>It means that the possession of the required skills and knowledge to perform the service</td>
</tr>
<tr>
<td>Access</td>
<td>It involves the approachability and ease of contact</td>
</tr>
<tr>
<td>Courtesy</td>
<td>It involves the politeness, respect, consideration, and friendliness of contact personnel (Including receptionists, telephone operators, etc.)</td>
</tr>
<tr>
<td>Communication</td>
<td>It means keeping customers informed in the language they can understand and listening to them</td>
</tr>
<tr>
<td>Credibility</td>
<td>It involves the trustworthiness, believability, and honesty</td>
</tr>
<tr>
<td>Security</td>
<td>It is the freedom from any danger, risk or doubt</td>
</tr>
<tr>
<td>Understanding/ Knowing</td>
<td>It involves making the effort to understand the customers’ needs</td>
</tr>
<tr>
<td>Tangibles</td>
<td>It includes the physical evidence of the services</td>
</tr>
</tbody>
</table>

Source: Parasuraman et al. (1985), p. 47

Based on the dimensions of the service quality listed in Table 1, Parasuraman et al. (1985) developed a model for the determinants of the perceived service quality, which indicated that the perceived service quality was the consumer’s comparison between the expected service and the perceived service. In 1998, Parasuraman et al. further purified and distilled these ten dimensions to five: (1) tangibles; (2) reliability; (3) responsiveness; (4) assurance; and (5) empathy. In turn, these five attributes constitute the base of a global measurement devise for the service quality, called, SERVQUAL. Each item in SERVQUAL was measured based on the customers’ perceptions (Ibid). According to SERVQUAL, it is assumed that the service quality is critically determined by the disparity between the expectations and perceptions of customers, and the services actually delivered to customers (Curry and Sinclair, 2002). SERVQUAL is regarded as superior, since it also focuses on an adequate understanding of customer expectations (Gupta et al., 2005).

After that, Hedvall and Paltschik (1989) identified two innovative dimensions: “willingness and ability to serve” and “physical and psychological access”. Based on both group-focused interviews
and questionnaire survey studies, Dabholkar et al. (1996) developed and validated a five-dimension scale to measure the service quality within the setting of retailing. The five dimensions are: physical aspect, reliability, personal interaction, problem solving, and policy. While examining service quality factors in determining the department store chain performance, Sin and Cheung (2001) uncovered six dimensions: personal interaction, policy, physical appearance, promise, problem solving and convenience. Essentially, their scales contain similar contents as those of Dabholkar et al. (1996), except for one new factor, i.e. convenience. Then, Mehta et al. (2000) applied both SERVQUAL and the five-dimension model proposed by Dabholkar et al. (1996) into two different settings: service-intensive retailing and goods-intensive retailing. Furthermore, Mehta et al. (2000) concluded that the SERVQUAL worked better in the first setting, while Dabholkar et al.’s (1996) model was superior in the latter situation.

It is now well established that the service quality is important to business outcomes in higher stock prices (Aaker and Jacobson, 1994), higher corporate performances (Easton and Jarrell, 1998), and higher market values of the firm (Hendricks and Singhal, 1997).

1.1.3 E-service Quality

The Internet is fast becoming an important new channel for businesses in many sectors, which raises e-services as the emergent business paradigm in the industrialized work (Pedro, et al., 2001). Obviously, the influence of the Internet on creating e-services has been revolutionary for both providers and their customers (Boyer, et al., 2002). According to Boyer et al. (2002), a unique opportunity was provided by e-services for businesses to offer new models for service design strategies and new service developments. Firstly, all providers of services, whether they are traditional ‘brick-and-mortar’ or pure Internet players, now have more delivery channel options for competing (Ibid). Secondly, they can offer many new services more economically with both greater geographic reaches and product varieties (Ibid). As a consequence, the e-service market creates opportunities for providing value-added services offered by different companies (Casati and Shan, 2001).

Nowadays, the most experienced and successful e-commerce companies are beginning to realize that the key determinants of successes or failures are not merely the web presence or low price but also the delivering of the high e-service quality (Yang, 2001; Zeithaml, 2002; Wang, 2003). The recent research shows that the price and promotion are no longer the main drawbacks for customers to make a decision on a purchase (Schneider and Perry, 2002). More and more sophisticated online customers would rather pay a higher price to e-retailers who provide high quality e-services (Ibid).

The various dimensions of the e-service quality remain relatively uncharted (Zeithaml et al., 2002). Exploratory studies have suggested, depending on the abstractions, lots of researchers talk about the dimensions of the e-service quality (Joseph et al., 1999; Zeithaml et al., 2000; Barnes and Vidgen, 2001; Cox and Dale, 2001; Jun and Cai, 2001; van Riel et al., 2001; Yang et al., 2001;
Chapter 1

Although the exploration of the e-service quality “is in its early stages” and studies do not fully concur about the dimensions and statements explored (Zeithaml et al., 2002), the following points can be identified on the basis of Zeithaml et al’s (2002) and Hernon and Calvert’s (2005) work: (1) multiple factors influence the e-service quality instead of only a single factor; (2) the recovery service involves different dimensions than core dimensions and most of the ‘personal service’ issues belong to the category of the recovery services instead of the core services; (3) the satisfaction, intention to purchase and purchase are affected by the e-service quality; and (4) the perceptions of the e-service quality are related to the technology readiness and the customer-specific construction.

1.1.4 E-service Quality in Online Shopping

As the Internet has been spreading, it has become a popular marketing channel (Cho and Park, 2001). It is particularly interesting for academics and practitioners, especially those in the field of the e-commerce to analyze customer evaluations in the online shopping (Wu, 2003). “The online shopping is a complex process, which can be divided into various sub-processes, e.g. the navigations, the searches of information, the online transactions, and the customer interactions.” (Lee and Lin, 2005, p.162). The total population shopping online in 2002 is 66 million and this figure is expected to double by 2007 (Nua Internet Surveys, 2002). Moreover, revenues from the online retailing continue growing too. A recent Forrester Research Report forecasts that the online retail sales would reach US$ 269 billion in 2005, from US$ 45 billion in 2000 (Dykema, 2000). According to Grewal et al. (2002) and Monsuwe et al. (2004), the online shopping can fulfill several consumers’ needs more effectively and more efficiently compared with the conventional shopping.

The e-service quality is one of the key determinants of the success of online retailers (Jun, et al., 2004). According to Zeithaml (2002), online retailers fail primarily due to the poor quality services, which are rendered to their customers. Online customers expect fast, friendly and high quality services (Singh, 2002). They also want choices, conveniences and responsive services with a personal touch (Zhao and Gutierrez, 2001). Moreover, customers are unlikely to evaluate each sub-process in detail during a single visit to a store. On the contrary, they will perceive the services as an overall process and outcome (van Riel et al. 2001). For online consumers, the e-service quality of a high standard is the means by which the potential benefits of the Internet are realized (Yang, 2001).

According to Davis (1993), consumers’ attitudes toward Internet shopping depend on the direct effects of relevant online shopping features. The features of online shopping can be either
consumer’s perceptions of functional and utilitarian dimensions, such as “ease of use” and “usefulness”, or their perceptions of emotional and hedonic dimensions like “enjoyment” (Mathwick et al., 2001; Menon and Kahn, 2002).

According to Cai and Jun (2003), firstly the e-service quality greatly influences customers’ satisfactions and intentions to shop online, and secondly the e-service quality is critical in attracting potential customers. Instead of trying to maximize indiscriminately the quality of the e-service provided, the company should design and implement a realistic program to achieve an optimum level of the e-service quality and the e-service quality is an essential component of the customer-centric strategy (Calin, 2003).

Therefore, many practitioners and academicians in online shopping have recently focused on the e-service quality to attract potential customers and on how to retain current customers (Jun et al., 2004). Additionally, Zeithaml (2002) emphasized that companies should focus on e-services quality including all cues and encounters that occurred before, during, and after the transactions.

1.2 Problem Discussion

The Internet has been become a platform for business transactions recently (Liu et al., 2003). Many companies are adopting Internet-based e-services for conducting business transactions and sharing business information with their customers and business partners (Torre and Moxon, 2001). Previous studies (Yang, 2001; Janda et al., 2002) have revealed that the e-service quality in online environments is an important determinant of the effectiveness of the e-commerce. Thus, it is particularly interesting and important for academics and practitioners, especially those in the field of the e-commerce to analyze customer evaluations of the online shopping (Wu, 2003). The ability of e-services to satisfy the demands of customers is assisting businesses in reducing service costs and obtaining more benefits (Lu and Zhang, 2003). Furthermore, the customers’ perceived e-service quality is one of the critical determinants of the online businesses’ success (Yang, et al. 2004).

1.2.1 Purpose

Based on the reasons above, the purpose of this thesis is to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping.

1.4 Outline of the Study

This study is divided into seven chapters. Till this moment, the contents of the first chapter have already been presented: i.e. a short introduction and a background of the research area, a problem discussion and the purpose. Subsequently, the outline of the study will be discussed in Figure 1.
Chapter Two provides readers with an overview of the literatures related to the purpose in this study, i.e. the previous researches within the area of the customer perceived e-service quality in online shopping.

Chapter Three provides the readers with specific research questions based on the purpose. During the description of the frame of references, firstly, the visualization of frame of references is shown. Secondly, the frame of the reference for this study is described, where we conceptualize the useful aspects of the literatures in our research area.

Chapter Four describes and motivates the research methodology to be used in this study.

Chapter Five provides a delineation of the empirical data gathered in the research. Here, the data collected by interviewing four customers in online shopping will be presented.
Chapter Six includes an analysis of the empirical data. The analysis contains both within-case analyses of each interviewee as well as cross-case analyses, where the data from the different interviewees are compared.

Chapter Seven contains the conclusions that can be drawn from this study. The conclusions will be given in relation to the five research questions. The chapter is ended with the implications for managements, theories, and further researches within the research area of customer perceived e-service quality in online shopping.
**Chapter 2 Literatures Review**

This chapter consists of theories relevant to the research area. In order to give readers a clear idea about the research area we will firstly introduce the dimensions of e-service quality and then address Lee and Lin’s (2005) dimensions. Finally we will explain online shopping.

### 2.1 Dimensions of E-service Quality

In section 2.2.2, we have already introduced the SERVQUAL. However, SERVQUAL does not mention the e-service quality, since the five dimensions primarily address the customer-to-employee interactions instead of the customer-to-web-site interactions (Yang et al., 2004). Accordingly, some researchers attempted to identify the key attributes that best fit the online business environments (Joseph et al., 1999; Zeithaml et al., 2000; Barnes and Vidgen, 2001; Cox and Dale, 2001; Jun and Cai, 2001; van Riel et al., 2001; Yang et al., 2001; Chaffey and Williams, 2002; Gefen, 2002; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Collier and Bienstock, 2003; Gournaris and Dimitriadis, 2003; Santos, 2003; Surjadjaja et al., 2003; Yang et al., 2003; Patasuraman et al., 2004; Lee and Lin, 2005).

Joseph et al. (1999) uncovered six underlying dimensions of the online banking service quality: convenience/accuracy, feedback/complaint management, efficiency, queue management, accessibility and customisation. Zeithaml et al. (2000) uncovered 11 dimensions of the online retailing service quality in a series of group-focused interviews, which were the access, ease of navigation, efficiency, flexibility, reliability, personalization, security/privacy, responsiveness, assurance/trust, site aesthetics, and price knowledge.

Based on 54 students’ evaluations on three UK-based Internet bookshops, Barnes and Vidgen (2001) extended the SERVQUAL scale and established a WebQual Index. The index addressed the following seven customer service quality aspects: reliability, competence, responsiveness, access, credibility, communication, and understanding the individual. Additionally, an important article by Cox and Dale (2001) noted the traditional service quality dimensions, such as competence, courtesy, cleanliness, comfort, and friendliness, were no longer relevant in the context of the online retailing, whereas other factors, such as the accessibility, communication, credibility, understanding, appearance and availability were critical to the success of online businesses. The online retailing service quality dimensions pointed by Cox and Dale (2001) are based on a review of the literatures.

Jun and Cai (2001) focused on the issues associated with the Internet banking service quality. In their study, customer anecdotes of critical incidents in Internet banking were analysed. They identified three broad categories of the Internet banking service quality: customer service quality, banking service product quality, and online systems quality. van Riel et al. (2001) derived three
key portal service quality attributes affecting consumers’ overall satisfactions with a portal: core service, support service and user interface. A content analysis on the customer evaluations of Internet pharmacy services conducted by Yang et al., (2001) revealed three categories of quality dimensions: product cost and availability, customer service, and online information system.

Chaffey and Williams (2002) examined online services using the SERVQUAL model and concluded that the constructs of SERVQUAL were valid. On the other hand, they suggested that both the provision of accessible and relevant information, and the site technical performance were important. Moreover, Gefen (2002) suggested that in evaluating the online service quality, the five dimensions of the SERVQUAL model should be collapsed into three: tangibility; a combined dimension of the responsiveness, reliability and assurance; and empathy.

Kaynama and Black (2002) identified the following dimensions for online travel agencies: content and purpose, accessibility, navigation, design and presentation, responsiveness, background, and personalization and customization. After that, Madu & Madu (2002) provided 15 dimensions for e-services: the performance, features, structure, aesthetics, reliability, storage capability, serviceability, security and system integrity, trust, responsiveness, product/service differentiation and customization, web store policies, reputation, assurance, and empathy, which were derived based on a review of the literatures. Both the positive and negative elements affecting the customers’ perceptions of virtual operations were identified.

Parasuraman (2002) examined the issue of the e-service quality, too. His initial research in the area indicated that there were eleven dimensions of the e-service quality, which were the same as those proposed by Zeithaml et al. (2000). Then, based on a sample of 540 Internet users, Parasuraman (2002) concluded that there were four key dimensions: efficiency, fulfillment, reliability and privacy. Wolfinbarger and Gilly (2002) uncovered four factors of online retailing experiences, through group-focused interviews, a content analysis, and an online survey of 1013 panel members: web site design, reliability, privacy/security, and customer service (This factor was primarily related to the customer-to-employee interactions). Later on, Yang and Jun (2002) surveyed 271 ISP (Internet service provider) subscribers and uncovered six dimensions of the online retailing service quality: reliability, access, ease of use, personalization, security, and credibility.

Zeithaml et al. (2002) conducted a critical review of extant literatures on the e-service quality literature and identified seven dimensions of the e-service quality: efficiency, reliability, fulfillment, privacy, responsiveness, compensation and contact. These seven dimensions were further classified into two categories: a core service scale for measuring the customers’ perceptions of the e-retailers’ service quality when customers experienced no problems with the site (efficiency, reliability, fulfillment and privacy) and a recovery service scale for measuring the e-retailers’ service recovery when problems occurred (responsiveness, compensation and contact).
Chapter 2

Collier and Bienstock (2003) suggested another discrete set of dimensions about the e-service: order timeliness, order accuracy, and order condition. Gournaris and Dimitriadis (2003) explored three quality dimensions: usability, information and interaction. Santos (2003) identified, through group-focused interviews, two categories of the online service quality dimensions that influenced customers’ retentions. One of the categories of the online service quality was the active group. The dimensions in the active group were primarily associated with the online customer service quality, which were: reliability, efficiency, support, communication, security, and incentive. Surjadija et al. (2003), found three categorized of e-service operations: services marketing, service design, and service delivery.

Yang et al. (2003), who advanced 14 dimensions, noted that: it was the initial step in planning service quality improvement endeavors through listening to the voices of their customers. In turn, the identification of customers’ expectations related to the Internet purchasing provided the frame of reference for online companies to assess their overall service quality. Their dimensions were responsiveness, credibility, ease of use, reliability, convenience, communication, access, competence, courtesy, personalization, continuous improvement, collaboration, security/privacy, and aesthetics. Later on, on the basis of Zeithaml et al.’s (2002) study, Parasuraman et al. (2004) developed a four-dimensional e-service quality scale: efficiency, fulfillment, system availability, and privacy. By removing statements and referring only to the service recovery, Parasuraman et al., (2004) formed a three dimensional scale (E-Recc-QUAL): responsiveness, compensation, and contact.

Recently, Lee and Lin (2005) identify the main factors influencing the customer perceptions of the e-service quality in online shopping, using a modified version of the SERVQUAL model. Those factors are: (1) website design; (2) reliability; (3) responsiveness; (4) trust; and (5) personalization. Detailed explanations are described in Table 2 (See P. 12).

2.1.1 Website Design

Web is rapidly becoming the platform, through which many companies deliver services to businesses and individual customer (Casati and Shan, 2001). These customer-to-website interactions in online retailing, to a great extent, replace the traditional customer-to-employee interactions, such as sales clerk services (Lohse and Spliller, 1998).

Website has become a standardized infrastructure for a great number of diverse applications including the access to information, communication, e-commerce, energy management and sophisticated telemedium applications (Kapsalis et al., 2004). The goal of some websites is to deliver services to its intended audiences and to do so with an elegant design (Turban, et al., 2004). According to Kim and Lee (2002), the website design describes the appeal of the user interface design presented to customers.
Table 2: Customer Perceptions of E-service Quality Dimensions

<table>
<thead>
<tr>
<th>Customer perceptions of E-Service Quality Dimensions</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web site design</td>
<td>Customer perceptions of the degree of the user friendliness in using an online store</td>
<td>Parasuraman et al. (1988); Kim and Lee (2002).</td>
</tr>
<tr>
<td>Reliability</td>
<td>Customer perceptions of the reliability and security of the service provided by an online store</td>
<td>Parasuraman et al. (1988); Kim and Lee (2002).</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Customer perceptions of the responsiveness and helpfulness of the service provided by an online store</td>
<td>Parasuraman et al. (1988); Kim and Lee (2002).</td>
</tr>
<tr>
<td>Trust</td>
<td>Customer perceptions of the lever of the trust mechanisms provided by an online store</td>
<td>Kimery and McCard (2002).</td>
</tr>
<tr>
<td>Personalization</td>
<td>Customer perceptions of the degree to which an online store provides differentiated services to satisfy specific individual needs</td>
<td>Parasuraman et al. (1988); And Yang and Jun (2002).</td>
</tr>
</tbody>
</table>

Source: Lee and Lin (2005), p.167

The online shopping employs a complicated database interface, serving as an expert system. From this perspective, online consumers are the end-users of the computer programs and network systems (Yang et al., 2004). As end-users, consumers often seek desired products and service information through websites (Yang, et al., 2003). Doll and Torkzadeh (1988) gauges five dimensions influencing the end-users’ satisfaction with commercial websites: content, accuracy, format, ease of use and timeliness. Beyond the five attributes employed in the measurement scale, other attributes, which are unique to the Internet, such as security and privacy, can also be considered as important in assessing the commercial websites (Giannakoudi, 1999).

Another important aspect of the websites to enable customers to function more independently and conduct many transactions on their own sides (Jun, et al., 2004). They can search for particular products/services, chat with other members in virtual communities, and obtain advice or comments from peers (Hagel, 1999). Therefore, the website should be well-organized enabling consumers to navigate smoothly and in an enjoyable manner (Rice, 1997) and the designing of the database should be timely, informative, and user-friendly (Wigand, 1997).

Recently, several studies on the e-commerce note that some features of websites are important for the business to the success. For example, D’Angelo and Little (1998) argue that the factors such as navigational and visual characteristics, and the practical considerations, such as the image, background, colour, sound, video, media and content are critical features of a website. Similarly, Zeithaml et al. (2000) shows two important factors that are critical for a website: aesthetics and
navigation. The aesthetics and appearances of a website are referred as the “e-scape” (Gummerus et al., 2004). The e-scape is comparable to the traditional service scape (Bitner, 1992) and reflects how information is presented through the use of colours, layouts, pictures, and font sizes as well as styles (Semeijn et al., 2005). Websites with the adequate navigation quality consistently enable users to find what they want easily, via a dependable and well-performing search engine offering fast and logical manoeuvrability (Zeithaml et al., 2000).

Dellaert and Kahn (1999) conducted laboratory experiments, which indicated that the undue information download waiting time negatively affected consumers’ perceptions of a website’s performance. Liu and Arnett (2000), through web and e-mail surveys of 689 webmasters of “Fortune” 1,000 companies’ website, discovered four major factors leading to the success of website, i.e. the information and service quality, system use, playfulness, and system design quality. These scales, however, have one major limitation, i.e. they are geared toward helping website designers to better design websites affecting the interaction perceptions of the users. Therefore, the scale is more pertinent to the interface design than the service quality measurement (Zeithaml et al., 2002).

Cox and Dale (2001) discovered and statistically validated four quality factors of a website, which were: ease of use, customer confidence (how does the website generate customer trust), online resources (the capability of the website to offer products/services) and relationship services (how does the website bond with the customer and inspire loyalty).

Aladwani and Palvia (2002) uncovered four key dimensions of the web-based application quality: specific content, content quality, appearance, and technical adequacy. In the same vein, Loiacono et al. (2002) surveyed 847 undergraduate students and established a scale called WEBQUAL (web quality) with 12 dimensions: informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow (emotional appeal), integrated communication, business processes, and substitutability. Overall, the WEBQUAL scale is geared toward helping website designers to better design websites affecting the interaction perceptions of the users (Zeithaml et al., 2002).

In addition, Zeithaml et al. (2002) unmoved several quality dimensions related to the commercial websites: ease of navigation, flexibility, efficiency, site aesthetics and security. Santos (2003) uncovered five dimensions of the websites: i.e. ease of use, appearance, linkage, structure and layout, and content, and labelled them as incubative dimensions.

Voss (2003) proposed three key quality factors relating to the customer-cantered service in a virtual environment—trust, information and status, and configuration and customisation, of which, two dimensions: i.e. information and status, and configuration and customisation are associated with the capability of websites. Wang (2003), who examined the website service quality, provided an instrument based on a study of 260 adult respondents. The final form encompassed both the
dimensions and the actual statements comprising “reliability”, “responsiveness”, “assurance”, and “empathy”.

An important measure of the website quality is its design, i.e., the look and feel of the site (Day, 1997). Additionally, Madu and Madu (2002) identified several potential problems, which should be paid special attentions to in the website design, such as: basic navigation (it was important to know where you were and where you were going), offering too many choices (too many choices might not necessarily mean a good thing and could lead to confusions), lack of contexts, delays caused by network connections, and lack of organization information.

Customers are willing to visit more often to and stay longer times with the attractive websites (Shaw, et al., 2000). Contrarily, the poor design of websites will make the company lose an opportunity to enhance the company image if it does not necessarily directly lose customers (Thelwall, 2002). According to Turban et al. (2004), a successful website design should meet customers’ expectations and problems. Furthermore, on the basis of the work conducted by Meister et al. (2000), the biggest challenge of the e-services quality is to balance the greater customization possible (which typically results in more complex websites) with a simple, accessible and easily used web interface. The influence of website designs on the e-service quality has been studied extensively. For instance, a recent empirical study finds that the factors of the website design are the strong predictors of customer quality judgments, satisfactions, and loyalties for Internet retailers (Wolfinbarger and Gilly, 2003).

Following Than and Grandon (2002), the quality of the website design is crucial for the online shops. A website should be designed in an attractive way to convert browsers into buyers. It should be user-friendly and easy to navigate with proper product-information presentations. The ability to customize website appearances and satisfy customer requirements is considered as one of the key benefits of using technology in services (Bitner et al., 2000). If a commercial business-to-consumer (B2C) website generates sales successfully, the website must have features which appeal to potential buyers (Lynch at al., 2001). More specifically, various observers note that a website should be structured so that it can attract consumers who are most likely to be the initial shoppers (Goldsmith, 2001).

Overall, the website design is an important factor in determining the customers-perceived e-service quality and it has significant and positive impacts on the customers’ perceived e-service quality (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005).

2.1.2 Reliability
Reliability represents the ability of a website to fulfill orders correctly, deliver products promptly, and keep personal information secure (Parasuraman et al., 1988; Kim and lee, 2002). In an e-commerce context, the reliability often refers to a functional quality dimension and at the same time to the reliability of the information content provided on the website (Semeijn et al., 2005).
Online consumers apparently want to receive the right quality and right quantity of items that they have ordered within the time frame promised by the online retailers, and they expect to be billed accurately (Jun, et al., 2004). Accordingly, to be considered as reliable, online service providers must deliver the promised services accurately and within the promised time frame (van Riel et al., 2003).

The “reliability” factors comprise four items: accurate online transactions, accurate records, correct performances, and fulfillments of promises (Yang et al., 2004). The reliability of the information provided on the website is operationalized as accurate. Accurate websites provide visitors with the information that is considered as useful and reliable, and most likely to occur effectively when the information is provided in an attractive manner (Semeijn et al., 2005).

The importance of the reliability has been emphasized by the information technology-based service (Lee and Lin, 2005). Besides, Zhu et al. (2002), and Lee and Lin (2005) argue that the dimension of the reliability has a direct positive effect on the perceived e-service quality and the customer satisfaction.

Consequently, in order to simultaneously achieve high levels of the consumers’ perceived e-service quality and satisfaction, online retailers should particularly focus on the dimension of the reliability (Jun et al., 2004). According to Zeithaml et al. (2000), Barnes and Vidgen (2001), Gefen (2002), Madu and Madu (2002), Parasuraman (2002), Wolfinbarger and Gilly (2002), Yang and Jun (2002), Zeithaml et al. (2002), Santos (2003), Wang (2003), Yang et al. (2003), and Lee and Lin (2005), the reliability is the most important determinant of the perceived e-service quality.

2.1.3 Responsiveness
The responsiveness describes how often an online store voluntarily provides services (e.g. customer inquires, information retrieval and navigation speed) that are important to its customers (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002). According to Wang (2003), the “responsiveness” measures the ability of a company to provide the appropriate information to customers when a problem occurs, a mechanism for handling returns, and an arrangement for online guarantees.

A quick response to requests is likely to increase the perceived convenience and diminish the uncertainty, and is also an important way for companies to show that they are customer-oriented and act benevolently toward customers (Gummerus et al., 2004). Therefore, customers expect online stores to respond to their inquiries promptly (Liao and Cheung, 2002; Jay, 2004), and customers have identified a fast response as an element of high-quality services (Voss, 2000).

According to Turban et al. (2004), the most popular online customer service tool is email, which is inexpensive and fast. E-mail is used to disseminate information and conduct responses to customer inquiries. Though the responsiveness in general has a positive influence on the perceived e-service
quality, it should be noted that it might impact quality perceptions negatively if customers feel that they are bombarded with e-mails from the company (Zeithaml et al., 2000).

According to Yang et al. (2004), the responsiveness is the foremost critical factor in determining the customer service quality. Moreover, Surjadijaja et al. (2003) regard the responsiveness as a leading determinant in e-service operations. Overall, in order to achieve high levels of the consumers' perceived e-service quality and their satisfactions simultaneously, online retailers should particularly focus on the dimensions of the responsiveness, too (Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen, 2002; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Zeithaml et al., 2002; Yang et al., 2003; Parasuraman et al., 2004; Lee and Lin, 2005).

2.1.4 Trust
Trust is at the center of the e-commerce with much academic discourse surrounding the security, promise fulfillment, and confidence (Lynch and Lundquist, 1996). Kimery and McCard (2002) defined the trust as the customer willingness to accept the vulnerability of an online transaction based on their positive expectations regarding future online store behaviors. Trust is a significant antecedent of participations in commerce generally, and especially in online settings because of the increased ease with which online shopping can behave opportunistically (Reichheld and Schefter, 2000).

According to Bandyopadhyay (2002), the trust is a mutual issue since buyers need to have trust in sellers in terms of the e-service quality as well as the confidentiality of data. The lack of the trust in the online transactions has been identified by the e-retailers as one of the major obstacles in the adoption of online shopping in a large number of discussions (Hoffman, et al., 1999). Since this shopping medium is relatively new and most of people have only little experiences with it, the shopping on the Internet provides a challenge to many consumers (Monsuwe et al., 2004).

Egger (2002) proposed a number of factors, which were important for the development, and maintenance of the trust. There were grouped into the categories of pre-purchase knowledge, interface properties, and information contents (for instance, the information provided by the store about their policies/guarantees). Urban et al., (2000) also described that the information about policies and guarantees on the website was an important factor of the trust. Moreover, Kim and Moon (1998) and Roy et al. (2001) provided empirical results, which suggested that, the visual features of a customer interface, specially the use of graphics and color, could be manipulated in order to induce feelings of trustworthiness. Besides, according to McCole (2002), the customer loyalty was also a significant factor of trust.

The trust should be even more important in the e-commerce than in the traditional commerce because of the paucity of rules in regulating the e-commerce and because online services and products typically are not immediately verifiable (Gefen and Straub, 2004). For the online shops,
it is critical to maintain the high level of the trust unless they have already established entities in the non-cyber-business environments (Turban et al., 2000).

The online shopping context comprises the interaction between customers and online stores (Bakos, 1991). In addition, Voss (1999) and Daffy (2001) emphasize the importance of the trust in developing a sustainable relationship among a company, its customers, and its business partners. Thereafter, trust is one of the substantial dimensions of the e-service quality and the trustworthiness has significant and positive impacts on the online buyers’ perceived service quality (Zeithaml et al., 2000; Loiacono et al., 2002; Madu and Madu, 2002; Parasuraman, 2002; Voss, 2003; Lee and Lin, 2005).

2.1.5 Personalization
Personalization involves the individual attentions, the personal thanks which customers note from online stores, and the availabilities of a message area for commenting customer questions (Yang, 2001). The heart of the personalization is to satisfy the individual customer’s unique needs (Huang and Lin, 2005). Thus, the personalization has the potential to completely revolutionize the ways in which a web-based business markets its products and maintains its customers’ relationships (Reynolds, 2000).

Raisch (2001) thought that the personalization was one of the effective methods of solving the problem of “managed-chaos”, which existed in the current art of the measurement and data mining in the web-centered area of industries. Moreover, it was influential for online service producers to apply the personalization during the process of providing services to customers because both environmental variables and customers’ characteristics variables influenced the online customer’s decision-marking process (Ibid).

According to Huang and Lin (2005), the personalization gives each customer a unique experience. In order to match services with the individual customer, usually customers are asked to fill in questionnaires by conducting interviews, customers’ behaviors are observed online through the use of a cookie, or customers’ earlier purchase behaviors are analyzed (Turban et al., 2004). Therefore, personalization constitutes also one of the factors in determining the customers’ perceived e-service quality (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005).

2.2 Online Shopping

With the development of Internet and web-based technologies, online customers are gradually obtaining unlimited accesses to the information which they require and are enjoying a wider range of choices in selecting products and services with highly competitive prices (Park and Kim, 2003; Jun et al., 2004). That is why some consumer-purchases are mainly on the basis of the cyberspace
appearance such as pictures, images, quality information, and video clips of the product, instead of the actual experience (Lohse and Spiller, 1998; Kolesar and Galbraith, 2000). The online shopping environment enables consumers to reduce their decision-making efforts by providing vast selection, information screening, reliability, and product comparison (Alba et al., 1997).

“Online shopping is a complex process, which can be divided into various sub-processes, e.g. the navigations, the searches of information, the online transactions, and the customer interactions.” (Lee and Lin, 2005, p.162). Yoo and Donthu (2001) developed a measurement instrument for measuring an online shopping site condition, SITEQUAL, which included four dimensions: (1) ease of use; (2) aesthetic design; (3) processing speed; and (4) security.

Many studies have investigated the online shopping attributes (Jarvenpaa and Todd, 1997; Lohse and Spiller, 1998; Elliot and Fowell, 2000; Szymanski and Hise, 2000). For example, Jarvenpaa and Todd (1997) described that the merchandising included product-related characteristics such as the assortment, variety, and product information. Customers wanted the careful, continuous, useful communications and the access of geographic barriers (Lohse and Spiller, 1998). The security of online transactions continued to dominate the discussions on the electronic commerce (Elliot and Fowell, 2000). The navigation and convenience were related to the user interface of an online shopping (Szymanski and Hise, 2000). However, Lim and Dubinsky (2004) classified the attributes of online shopping into six categories. The detailed explanations are described in Table 3 (See P. 19).

The online shopping fulfills several consumer needs more effectively and efficiently than the conventional shopping (Grewal et al., 2002; Monsuwe, et al., 2004). Firstly, with the online shopping, consumers can browse the entire product-assortment with the minimal effort, inconvenience and time investment (Monsuwe, et al., 2004). Secondly, consumers can efficiently obtain the critical knowledge about firms, products and brands, and thereby increase their competency in making sound decisions while shopping (Ibid). Thirdly, consumers can easily compare product features, availability, and prices more efficiently and effectively in the online shopping than the conventional shopping (Grewal et al., 2002). Fourthly, the online shopping provides a level of anonymity when shopping for certain sensitive products. Finally, the online shopping offers a high level of conveniences for those whose time costs are perceived to be too high to invest in the conventional shopping (Ibid).
Table 3: Summary of Online Shopping Attributes Used in Previous Studies

<table>
<thead>
<tr>
<th>Online shopping factors</th>
<th>Attributes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise</td>
<td>Product information</td>
<td>The perceived depth of product information</td>
</tr>
<tr>
<td></td>
<td>Brand selection</td>
<td>Well-known national brands</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>Merchandise price</td>
</tr>
<tr>
<td>Convenience</td>
<td>Timely delivery</td>
<td>Delivery on time, delivery options</td>
</tr>
<tr>
<td></td>
<td>Ease of ordering</td>
<td>Fast check-out, order confirmation by e-mail</td>
</tr>
<tr>
<td></td>
<td>Product display</td>
<td>Product lists with both click buttons and pictures</td>
</tr>
<tr>
<td>Interactivity</td>
<td>Customer support</td>
<td>Software downloading, e-form inquiry, order status checking, customer comment and feedback</td>
</tr>
<tr>
<td></td>
<td>Personal-choice helper</td>
<td>Keyword search, improved search function</td>
</tr>
<tr>
<td></td>
<td>Surfer postings</td>
<td>Customers’ review of product/service experience</td>
</tr>
<tr>
<td>Reliability</td>
<td>Reputation</td>
<td>Company information</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>Information on transaction security</td>
</tr>
<tr>
<td></td>
<td>Privacy</td>
<td>Privacy policies for personal information</td>
</tr>
<tr>
<td>Promotions</td>
<td>Promotion on the cybermall home page</td>
<td>Clearance, free shipping, frequent buyer incentives, prized for participation</td>
</tr>
<tr>
<td>Navigation</td>
<td>Time to get to home pages</td>
<td>The time taken from ads on other sites to home pages</td>
</tr>
<tr>
<td></td>
<td>Expected waiting time</td>
<td>The perceived duration of the time to download pages on the site</td>
</tr>
<tr>
<td></td>
<td>Waiting information</td>
<td>Duration information at the beginning of the wait, countdown information</td>
</tr>
</tbody>
</table>

Source: Lim and Dubinsky (2004), p.503
Chapter 3 Research Questions and Frame of References

This chapter will firstly provide readers with the research questions, which are derived from the purpose. Then the delimitations of this study will be stated. Finally, the frame of references will be presented.

3.1 Research Questions

To gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping

In the first chapter, the purpose has been formulated for this thesis, which is:

In order to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping, the five dimensions proposed by Lee and Lin (2005) will be focused on in the following part of the thesis. The measurement of the e-service quality on e-commerce applications has been receiving a great deal of attentions during the past few years, which have already been mentioned above. However, almost all of these studies on the measurement of the e-service quality only focus on the application of the SERVQUAL model by rewording the original scale items (Lee and Lin, 2005). Moreover, just a few of them have considered the online shopping contexts. Besides, the measurements in the studies mentioned above are elder than those conducted by Lee and Lin (2005). Consequently, Lee and Lin’s (2005) measurements of the e-service quality will be used in this study. Lee and Lin (2005) developed the instrument dimensions of the e-service quality by modifying the SERVQUAL model and considering the online shopping contexts from the customer perspectives. However, Lee and Lin (2005) have not gone deeply to address how customers perceive the e-service quality in online shopping from the five dimensions’ point of view. So our research questions (RQ) are proposed on the basis of Lee and Lin’s (2005) five dimensions of the e-service quality, i.e. the website design, reliability, responsiveness, trust, and personalization. Accordingly, the following research questions are developed for this thesis:

◆ RQ1: How does website design affect the perceived e-service quality in online shopping?
◆ RQ2: How does reliability affect the perceived e-service quality in online shopping?
◆ RQ3: How does responsiveness affect the perceived e-service quality in online shopping?
◆ RQ4: How does trust affect the perceived e-service quality in online shopping?
◆ RQ5: How does personalization affect the perceived e-service quality in online shopping?
shopping?

3.2 Demarcations

This thesis will investigate the research questions from the customer’s perspective, and no attentions will be paid from the company’s point of view. Besides, this study is also limited to the organizations’ B2C relationships and does not include any B2B interactions. On the basis of Zeithaml et al’s (2000) e-service quality definition, the e-service quality in this thesis is defined as the extent, to which a website facilitates the efficient and effective shopping, in the purchase of products or services.

3.3 Frame of References

The conceptualization presented in this chapter allows us to provide readers with a framework of theories on the research topic in the thesis. Most important of all, the research questions based on Lee and Lin’s (2005) five dimensions, i.e. the website design, reliability, responsiveness, trust and personalization, are dimensions of the e-service quality. Thus, Fig. 2 is a graphical illustration of how these dimensions affect the perceived e-service quality in online shopping, which presents our research questions.

Figure 2: Visualization of the Frame of References
RQ1: How does website design affect the perceived e-service quality in online shopping?
Kim and Lee (2002) indicated that the website design should describe the appeal of the user interface design presented to customers. Customers are willing to visit more often to and stay longer time with the attractive websites (Shaw, et al., 2000). On the basis of Turban et al’s (2004) studies, a successful website design should satisfy the expectations and problems of customers.

Wolfinbarger and Gilly (2003) found that the strong predictors of customer quality judgments, were the factors of the website design through an empirical study. According to the literature review in Chapter Two, there are a lot of researches talking about the factors, which affect the website design. Several potential problems were identified by Madu and Madu (2002), which should be paid special attentions to in the design of websites, such as: (1) Basic navigation --- it is important to let the customers know where they are and where they are going; (2) Not offering too many choices --- too many choices may not always be a good thing, which may sometimes lead to confusions; (3) Lack of contexts; (4) Delays caused by the poor network connections; and (5) Lack of information regarding the organizations. In addition, he also mentioned the structure/layout and aesthetic are important dimensions of the e-service quality. Some researchers argue that the factors such as visual characteristics/appearances (i.e. Images, backgrounds, colors, and structures/layouts) are critical features of the website design (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Loiacono et al., 2002; Santos, 2003). D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), and Santos (2003) described that website contents (i.e. suitable contents and special contents) were the critical features of a website. Rice (1997), D’Angelo and Little (1998), Parasuraman (2002), and Than and Grandon (2002) indicated that the navigation was an important factor of the website design. Santos (2003) mentioned that the linkages/choices were also important factors of the website design. Moreover, Zeithaml et al. (2000) showed two important factors that were critical for the website design, i.e. the navigation and aesthetic/e-scape. Day (1997) and Yang et al. (2003) showed that the aesthetic/e-scape was an influential dimension of the e-service quality. Furthermore, Kaynama and Black (2002) identified that the content, navigation, design and presentation were important factors of the website design for online travel agencies. More recently, Semeijn et al. (2005) made a definition of the aesthetic/e-scape (which reflected how information was presented through the use of colors, layouts, pictures, and font sizes as well as styles). Besides, Wigand (1997) showed that the database in well-organized websites should be timely, informative and user-friendly. Finally, Dellaert and Kahn (1999) indicated that the download waiting time negatively affected the consumers’ perceptions of a website’s performance.

Based on the literature review presented above, Table 4 contains a summary of the factors of website design affecting the perceived e-service quality in online shopping.
Table 4: Factors of Website Design Affecting the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>Factors</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation</td>
<td>Know where they are and where they are going</td>
<td>Rice (1997); D’Angelo and Little (1998); Zeithaml et al. (2000); Kaynama and Black (2002); Madu and Madu (2002); Parasuraman (2002); Than and Grandon (2002).</td>
</tr>
<tr>
<td></td>
<td>Understand the information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Find what they want</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Well-performing search engine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fast and logical manoeuvrability</td>
<td></td>
</tr>
<tr>
<td>Visual characteristics/appearance</td>
<td>Images</td>
<td>Day (1997); D’Angelo and Little (1998); Bittner et al. (2000); Cox and Dale (2001); Goldsmith (2001); Aladwani and Palvia (2002); Kaynama and Black (2002); Loiacono et al. (2002); Madu and Madu (2002); Santos (2003).</td>
</tr>
<tr>
<td></td>
<td>Backgrounds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures/layouts</td>
<td></td>
</tr>
<tr>
<td>Aesthetic/e-scape</td>
<td>It reflects how information is presented through the use of colors, layouts, pictures and font sizes as well as styles.</td>
<td>Day (1997); Zeithaml et al. (2000); Parasuraman (2002); Madu and Madu (2002); Yang et al. (2003); Semeijn et al. (2005).</td>
</tr>
<tr>
<td>Content</td>
<td>Suitable content</td>
<td>D’Angelo and Little (1998); Doll and Torkzadeh (1998); Aladwani and Palvia (2002); Kaynama and Black (2002); Madu and Madu (2002); Santos (2003).</td>
</tr>
<tr>
<td></td>
<td>Specific content</td>
<td></td>
</tr>
<tr>
<td>Linkage/choices</td>
<td>Suitable linkage</td>
<td>Madu and Madu (2002); Santos (2003).</td>
</tr>
<tr>
<td></td>
<td>Too many choices may not necessarily mean a good thing and could lead to confusions</td>
<td></td>
</tr>
<tr>
<td>Delays caused by network connections</td>
<td>Too slow download speed</td>
<td>Dellaert and Kahn (1999); Madu and Madu (2002).</td>
</tr>
</tbody>
</table>

RQ2: How does reliability affect the perceived e-service quality in online shopping?
In an e-commerce context, reliability often refers to a functional quality dimension and the reliability of the information presented on the website (Semeijn et al., 2005). Online consumers apparently want to receive the right quality and right quantity of their ordered items within the time frame promised by the online retailers. Of course, they expect to be billed accurately, too (Jun et al., 2004).

The reliability represents the ability of a website to fulfill the orders correctly, deliver the products promptly, and keep customers’ personal information secure (Parasuraman et al., 1988; Kim and Lee, 2002). Furthermore, Giannakoudi (1999), Zeithaml et al. (2000), Madu and Madu (2002),
Wolfinbarger and Gilly (2002), Yang and Jun (2002), Parasuraman (2002), Zeithaml et al. (2002), Santos (2003), Yang et al. (2003), and Parasuraman et al. (2004) also indicated the security was decisive to the perceived e-service quality. The “reliability” factor consists of four items, which are accurate online transactions, accurate records, correct performances and fullfilments of promises (Yang et al., 2004). Doll and Torkzadeh (1998) and Semeijn et al. (2005) indicated that it was very important that the information provided on the website was accurate. Furthermore, Collier and Bienstock (2003) and Jun et al. (2004) mentioned that it was also crucial to fulfill customers’ orders correctly. In the end, van Riel et al. (2003) stressed that it was influential to deliver the products/services within the promised time.

According to the literature reviews presented above, there are many researches discussing the reliability. A summary of those definitions are presented in Table 5.

Table 5: Definitions of Reliability Affecting Perceived E-service Quality In Online Shopping

<table>
<thead>
<tr>
<th>Definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided on the website are accurate</td>
<td>Doll and Torkzadeh (1998); Yang et al. (2004); Semeijn et al. (2005).</td>
</tr>
<tr>
<td>Fulfill orders correctly</td>
<td>Parasuraman et al. (1988); Kim and lee (2002); Collier and Bienstock (2003); van Riel et al. (2003); Jun et al. (2004); Yang et al. (2004).</td>
</tr>
<tr>
<td>Deliver promptly/ within the promised time</td>
<td>Parasuraman et al. (1988); Kim and lee (2002); van Riel et al. (2003).</td>
</tr>
<tr>
<td>Keep personal information secure</td>
<td>Parasuraman et al. (1988); Giannakoudi (1999); Zeithaml et al. (2000); Kim and lee (2002); Madu and Madu (2002); Parasuraman (2002); Wolfinbarger and Gilly (2002); Yang and Jun (2002); Zeithaml et al. (2002); Santos (2003); Yang et al. (2003); Parasuraman et al. (2004).</td>
</tr>
</tbody>
</table>

RQ3: How does responsiveness affect the perceived e-service quality in online shopping?

Responsiveness describes how often an online store voluntarily provides services to its customers. The services that are important to customers are, for example, customer inquiries, information retrievals and navigation speeds (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002). A quick response to requests is also one of the valuable factors of the responsiveness (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004). Wang (2003) described that the responsiveness could be measured by providing the appropriate information to customers when a problem occurs, and arranging for online guarantees (i.e. if the products have been authenticated on the website).

On the basis of the literature reviews described above, there are a large number of studies regarding the responsiveness. Table 6 summarizes the explanations of those definitions.
Table 6: Definitions of Responsiveness Affecting Perceived E-service Quality In Online Shopping

<table>
<thead>
<tr>
<th>Definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the appropriate service/information to customers when a problem</td>
<td>Parasuraman et al. (1988); Yang (2001); Kim and Lee (2002); Wang (2003).</td>
</tr>
<tr>
<td>occurs i.e. customer inquires</td>
<td></td>
</tr>
<tr>
<td>Information retrieval</td>
<td>Parasuraman et al. (1988); Yang (2001); Kim and Lee (2002).</td>
</tr>
<tr>
<td>The navigation speed</td>
<td>Parasuraman et al. (1988); Yang (2001); Kim and Lee (2002).</td>
</tr>
<tr>
<td>Arranging for online guarantees (i.e. if the products have been</td>
<td>Wang (2003).</td>
</tr>
<tr>
<td>authenticated on the website)</td>
<td></td>
</tr>
<tr>
<td>A quick response to requests</td>
<td>Voss (2000); Liao and Cheung (2002); Gummerus et al. (2004); Jay (2004).</td>
</tr>
</tbody>
</table>

RQ4: How does trust affect the perceived e-service quality in online shopping?
Trust is defined by Kimery and McCard (2002) as the customers’ willingness to accept an online transaction on the basis of their positive expectations regarding future online store behaviors. The trust is a significant antecedent of participations in commerce generally, and especially in online contexts since the online shopping can behave more opportunistically compared with the traditional shopping (Reichheld and Schefter, 2000). Moreover, Bandyopadhyay (2002) indicated that the trust was a mutual issue between sellers and buyers since buyers needed to trust sellers, and sellers needed to believe in buyers in terms of the quality of e-services as well as the confidentiality of data.

According to the narrowed-down scope of literature reviews introduced in Chapter Two, there are many researches, which study the factors affecting the trust. A number of factors are identified by Egger (2002), which are important for the development and maintenance of trusts. Those factors are grouped into the categories of pre-purchase knowledge, interface properties, and information contents (For instance, the information provided by the store regarding their policies/guarantees). Additionally, Madu and Madu (2002) mentioned store policies and reputations were meaningful dimensions of the e-service quality. Urban et al. (2000) indicated that the information about policies and guarantees on the website was also an important factor of the trust. Moreover, Kim and Moon (1998), and Roy et al. (2001) provided the empirical results, which suggested that, the visual features of a customer interface, specially the use of graphics and colors, could be manipulated in order to induce the feelings of the trustworthiness. Besides, according to McCole (2002), the customer loyalty was also an influential factor of the trust.

On the basis of the literature reviews above, a lot of researches have been conducted to study the factors affecting trust. The literatures, which will be used in this study, are summarized in Table 7.
Table 7: Factors of Trust Affecting Perceived E-service Quality In Online Shopping

<table>
<thead>
<tr>
<th>Factors</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-purchase knowledge</td>
<td>• Store reputation</td>
<td>Egger (2002); Madu and Madu (2002); McCole (2002).</td>
</tr>
<tr>
<td></td>
<td>• Customer loyalty</td>
<td></td>
</tr>
<tr>
<td>Interface properties</td>
<td>• Design of the user interfaces, i.e. the graphics and colors</td>
<td>Kim and Moon (1998); Roy et al., (2001); Egger (2002).</td>
</tr>
<tr>
<td>Information contents</td>
<td>• Information provided by the store about their policies/guarantees</td>
<td>Urban et al., (2000); Egger (2002); Madu and Madu (2002).</td>
</tr>
<tr>
<td></td>
<td>• Background information about the company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Other information provided to the customers</td>
<td></td>
</tr>
</tbody>
</table>

RQ5: How does personalization affect the perceived e-service quality in online shopping?

Personalization includes the individual attentions, the personal acknowledgements which customers note from online stores, and the availabilities of message areas for customers to make comments and suggestion (Yang, 2001). Huang and Lin (2005) pointed out that the personalization gave each customer a unique experience. Several methods are used to match services with the individual customer: 1) customers were usually asked to fill in questionnaires during conducting interviews; 2) customers’ behaviors were observed online through the use of cookies; and 3) customers’ earlier purchase behaviors were analyzed (Turban et al., 2004). It is the heart of personalization to satisfy the individual customer’s unique needs (Huang and Lin, 2005).

It can be seen from the literature reviews that there are some researches talking about the personalization. Table 8 points out the heart of the personalization affecting the customer perceived e-service quality.

Table 8: Definition of Personalization Affecting Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>Definitions</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfy the individual customer’s unique needs</td>
<td>Huang and Lin (2005).</td>
</tr>
<tr>
<td>Individual attentions</td>
<td>Yang (2001)</td>
</tr>
<tr>
<td>Personal acknowledgements which customers note from</td>
<td>Yang (2001)</td>
</tr>
<tr>
<td>online stores</td>
<td></td>
</tr>
<tr>
<td>Availables of message areas for customers to make</td>
<td>Yang (2001)</td>
</tr>
<tr>
<td>comments and suggestion</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 4 Methodology

In this chapter, we will describe the chosen scientific methods in collecting, handling and presenting the gathered data. The schematic presentation of the methodology used in this thesis is shown in Figure 3. In this chapter, we follow a series of steps, i.e. 1) research purpose; 2) research approach; 3) research strategy; 4) sample selection; 5) data collection; and 6) data analysis, while at the same time using the validity and reliability criteria to assure that the study fulfills certain standards.

Figure 3: Schematic Presentation of the Methodology
Source: Adapted from Foster (1998, p.81)

4.1 Purpose of Research

According to Yin (2003), the research purpose is to state what should be accomplished by conducting research and how the results from the research can be used. Research purposes can be classified in various ways. A widely used method identifies them broadly as: exploratory, descriptive and explanatory (Ibid).

Exploratory studies are the valuable means to find out what is happening, seek new insights, ask questions and assess phenomena in a new light (Saunders et al., 2000). The purpose of an exploratory research is to gather as much information as possible about a specific subject (Yin, 2003). There are three principal ways of conducting exploratory researches (Saunders et al., 2000): (1) Searching of the literatures, (2) Talking to experts in the subject, and (3) Conducting group-focused interviews. The descriptive research aims to portray an accurate profile of persons and events of situations (Saunders et al., 2000). The descriptive research is often used when a problem is well structured and there is no intention to investigate cause-effect relationship (Wiedershiem-Paul & Eriksson, 1999). The objective of explanatory research is to analyze the cause-effect relationship, and explain which cause produces which effect (Yin, 2003). Aaker and Day (1990) stated that the approach of the explanatory research should be used when it was necessary to show that one variable caused or determined the value of another variable.
On one hand, the purpose in this thesis is descriptive. Thus, the descriptive data will be collected and analyzed through detailed interviews. On the other hand, our purpose is also exploratory since our purpose is to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping, since little research has been done and we need to gain more insight into this area.

### 4.2 Research Approach

In this section, the deductive versus inductive research approaches, and the qualitative versus quantitative approaches will be presented.

#### 4.2.1 Qualitative versus Quantitative

There are two types of research approaches, i.e. qualitative and quantitative, based on the data types. The qualitative research is characterized by the opportunity to explore a subject in a manner as real as possible (Saunders et. al., 2000). The quantitative research involves numerical data or contains data that usually can be quantified (Ibid). Usually depending on the purpose of the study and the research questions, one of the two approaches is chosen (Chisnall, 1997). According to Saunders et al. (2000), there are some differences between qualitative and quantitative data:

- **Qualitative data**: (1) Based on meanings expressed through words, (2) Collection results in non-standardized data requiring classifications into categories, and (3) Analysis conducted through the use of conceptualizations.
- **Quantitative data**: (1) Base on meanings derived from numbers, (2) Collection results in numerical and standardized data, and (3) Analysis conducted through the use of diagrams and statistics.

Based on the purpose and research questions, the chosen approach for this thesis is the qualitative approach. This approach is appropriate since the aim of this thesis is to describe and get a deeper understanding of the dimensions that affect the customer perceived e-service quality in online shopping. Empirical data will be based on words, which then will be used as the main factors for the data analysis.

### 4.3 Research Strategy

A research strategy is how we will lead to the use of the research approach. There are five research strategies in the social sciences, i.e. experiments, surveys, archival analyses, histories, and case studies (Yin 2003). Each strategy is either better or worse depending on the type of the study in question (Ibid). Table 9 presents three conditions, which shows how those three conditions are related to the five major research strategies.
Table 9: Relevant Situations for Different Research Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Form of research questions?</th>
<th>Require the control of behavioral events?</th>
<th>Focuses on contemporary events?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>How, why?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey</td>
<td>Who, what, where, how many, how much?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Archival analysis</td>
<td>Who, what, where, how many, how much?</td>
<td>No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>History</td>
<td>How, why?</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Case study</td>
<td>How, why?</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Yin, 2003, p.5

Considering the conditions presented in Table 9, we decide to use the case study as the research strategy in our thesis, since all of the research questions in this thesis include the word “how”, we have no control of behavioral events and only focus on contemporary events.

In addition, Yin (2003) argued that it provided a better understanding to study multiple cases by comparing the cases in a cross-case analysis. The results from multiple case studies were also considered more robust compared with single case studies. Therefore, the multiple-case studies will also be used in this thesis.

4.3.1 Sample Selection

When the appropriate sources of evidences have been determined, it is important to find applicable and manageable samples to gather the empirical data (Saunders et al, 2000). According to Saunders et al. (2000), sampling techniques provide a range of methods that enable you to reduce the amount of data, which you need to collect, by considering only data from a sub-group rather than all possible cases or elements. The sampling techniques available can be divided into two types: (1) Probability or representative sampling and (2) Non-probability or judgmental sampling. According to Samouel et al. (2000), the probability sampling is a process where units are selected randomly, and all the units have the same chance of being selected. The non-probability sampling method basically allows a researcher to select cases that seem to be best suited to answer the research questions.

The sample selection in this thesis is based on the judgmental sampling, which is actually a non-probability sampling. It is made with the consideration of the purpose, i.e. to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping. Due to the time and financial limitations, we only investigate four samples, who had experiences with the online shopping for several years. In order to diversify the understanding of the topic, four interviewees were selected from different countries, with different backgrounds,
different ages and different online experiences. Authors kept the names of respondents anonymous and called them as respondents A, B, C and D so that they could feel free to give us more detailed information. Respondent A is a Chinese man, 32 years old, who is working as a research scientist (PhD) in Luleå University of Technology, Sweden. Respondent B is a Germany girl, 24 years old, who is an International master student in Luleå University of Technology, Sweden. Respondent C is a Spanish boy, 23 years old, who is an exchange student in Luleå University of Technology, Sweden. Respondent D is a Swedish man, 43 years old, who is an instructor / Ph.D. candidate in Luleå University of Technology, Sweden.

4.4 Data Collection Method

The information for case studies may come from six sources, according to Yin (2003), which are documents, archival records, interviews, direct observations, participant observations and physical artifacts. An explanation of the strengths and weaknesses of each source is presented in Table 10 (See P. 31).

In this study we have decided to use the interviews as the main method to collect data. The reasons are that (1) the interviews are guided two-way conversations, where the interviewer asks respondent questions in a fluid rather than a rigid way; and (2) the interviews are a flexible way of collecting data, which focus directly on the topic of case studies (Yin, 2003).

Yin (2003) mentioned three types of interviews and defined them as: open-ended, focused and structured. In a focused interview, respondent is interviewed for a very short period of time, and is asked a specific set of questions derived from the case study protocol (Yin, 2003). A focused interview is the most appropriate for our thesis, since we have a certain set of questions that are needed to answer in order to obtain the relevant data to our research questions and we want to allow the interviewees to express themselves freely.

According to Yin (2003), an open-ended interview is suitable when the interviewer asks questions about facts as well as opinions. Our interview questions are of an open-ended character, which further supports the use of a focused interview. The interviews in this thesis follow the interview guide presented in Appendix I. The appendix I covers all of the questions related to our research area. Moreover, we used this interview guide to ensure that all four interviews were conducted in the same manner.

In this study, the face-to-face and in-depth interviews were conducted with our respondents, since all of them were living in Luleå, i.e. the place where we conducted the study. Each interview lased approximately one hour or one and half hours. The first face-to-face and in-depth interview was conducted with a Chinese man in his office. The second face-to-face and in-depth interview was conducted with a Germany girl at Luleå University of Technology, Sweden. The third face-to-face interview...
and in-depth interview was conducted with a Spanish boy at Luleå University of Technology, Sweden. The fourth face-to-face and in-depth interview was conducted with a Swedish man in his office. Moreover, before the interview, the participants were informed the purpose of the study and how the interview would be conducted.

Table 10: Six Sources of Evidences: Strengths and Weaknesses

<table>
<thead>
<tr>
<th>Sources of Evidences</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>+ Stable: Can be reviewed repeatedly</td>
<td>- Retrievability: Can be low</td>
</tr>
<tr>
<td></td>
<td>+ Unobtrusive: Not created as a result of the case</td>
<td>- Biased Selectivity: If collection is incomplete</td>
</tr>
<tr>
<td></td>
<td>+ Exact: Contains exact names, references, and details of an event</td>
<td>- Reporting bias: Reflects (unknown) bias of author</td>
</tr>
<tr>
<td></td>
<td>+ Broad Coverage: Long span of time, many events, and many settings</td>
<td>- Access: May be deliberately blocked</td>
</tr>
<tr>
<td>Archival Records</td>
<td>+ (Same as above for Documentation)</td>
<td>- (Same as above for Documentation)</td>
</tr>
<tr>
<td></td>
<td>+ Precise and quantitative</td>
<td>- Accessibility due to privacy blocked</td>
</tr>
<tr>
<td>Interviews</td>
<td>+ Targeted: Focuses directly on case study topic</td>
<td>- Bias due to poorly constructed questions</td>
</tr>
<tr>
<td></td>
<td>+ Insightful: Provides perceived casual inferences.</td>
<td>- Response bias</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Inaccuracies due to poor recall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reflexivity: Interviewee says what interviewer wants to hear</td>
</tr>
<tr>
<td>Direct Observations</td>
<td>+ Reality: Cover events in real life</td>
<td>- Time consuming</td>
</tr>
<tr>
<td></td>
<td>+ Contextual: Covers context of event</td>
<td>- Selectivity: Unless broad coverage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reflexivity: Event may proceed differently because it is being observed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Cost: Hours needed by human observers</td>
</tr>
<tr>
<td>Participant Observations</td>
<td>+ (Same as above for direct observations)</td>
<td>- (Same as above for direct observations)</td>
</tr>
<tr>
<td></td>
<td>+ Insightful into interpersonal behavior and motives</td>
<td>- Bias due to investigator’s manipulation of events</td>
</tr>
<tr>
<td>Physical Artifacts</td>
<td>+ Insightful into cultural features</td>
<td>- Selectivity</td>
</tr>
<tr>
<td></td>
<td>+ Insightful into technical operations</td>
<td>- Availability</td>
</tr>
</tbody>
</table>

Source: Yin, 2003, p.86

4.5 Data Analysis

According to Yin (2003), the case study should have a general analytical strategy. There are three
general analytical strategies: (1) Relying on the theoretical propositions, (2) Thinking about the rival explanations and (3) Developing a case description.

Relying on the theoretical propositions means that the researcher collects data with the research questions and previous studies as a basis. The second strategy tries to define and test the rival explanations, which can be described as other possible influences and may distort the results of the research. The third is less preferable than the other two, but it can be a useful alternative when there is lack of previous researches (Ibid).

In this thesis we relied on theoretical propositions due to the fact that we sought to obtain our research questions from previous findings and studies. Moreover, we wanted to compare the data, which we gathered, with the findings of previous studies.

Miles and Huberman (1994, p.10) defined the analysis “as consisting of three concurrent flows of activity: data reduction, data display and conclusion drawing/verification.”

- **Data Reduction:** Data reduction is the process of analyzing that helps to sharpen, sort, focus, discard and organize the data so that conclusions can be drawn and verified. Data reduction should not be considered to be separate from the analysis, but as a part of it.
- **Data Display:** Data display includes taking the reduced data and displaying them in an organized and compressed way so that conclusions can be more easily drawn.
- **Conclusion Drawing/Verification:** In this stage the research starts to decide the meaning of the data by looking for patterns, explanations, noting regularities, propositions, causal flows and possible configurations.

These three stages are followed in Chapter Six (i.e. data analysis) in our thesis. After finishing the data collection, we organized the data for each case based on the variable sets that had been selected from the literature review and the research questions. We firstly used the within-case analysis and then the cross-case analysis to analyze our data. In the within-case analysis we analyzed the findings of each case based on the research questions. In the cross-case analysis we compared the different cases in order to find the similarities and differences between the cases.

### 4.6 Quality Standards

In order to reducing the possibility of getting the answer wrong, attentions need to be paid to two particular quality standards: validity and reliability (Saunders et al., 2000).

#### 4.6.1 Validity

The validity is concerned with whether the findings are really what they appear to be (Saunders et al., 2000). There are three different tactics for increasing the validity: using multiple sources of evidences, establishing a chain of evidences, and having key informants to review a draft of the
case study report (Yin, 2003). In order to increase the validity of our research, firstly before we conduct our focused interviews, our supervisor has looked through our interview guide to make sure that the research questions are clear. Secondly, in order for the interviewee to prepare for the interview, the participants were informed about the purpose of the study and how the interview would be conducted before the interview. Thirdly, the answers from the interviews were typed down shortly after the interview had taken place, while they were still fresh in our memory. Fourthly, the data were sent back to respondents to exclude any risks of misinterpretations. Besides, we used the pattern matching during our analysis to increase the validity. Finally, we used both the within-case analysis and the cross-case analysis. Fifthly, by having open-ended questions, which we ask the interviewees to answer in their own words, instead of leading them to answers, we have tried to avoid the subject biases.

4.6.2 Reliability
According to Yin (2003), the reliability demonstrates that the operations of a study, such as the data collection procedures, can be repeated with the same results. There are two important things that can increase the reliability: the use of a case study protocol and the development of a case study database (Ibid). In order to increase the reliability, firstly, we let respondents choose the week, day and time most suitable to them. This ensures that respondents have a positive attitude to participate. Secondly, the interviews take place in a calm and relaxed environment, and neither respondents nor the interviewers are stressed. Thirdly, during the interview we used a tape-recorder so that we could verify the answer after the interview and we also took notes during the interview in order to further increase the reliability. Fourthly, we have kept the notes and tapes from our interviews in order to develop a case-study database and double-check the information to reduce the risks of misinterpretations.

4.7 Summary

In order to help readers to better understand the research methodology, we summary the structure of the methodology in this thesis as Figure 4.
Figure 4: Structure of Methodology
Chapter 5 Empirical Data Presentation

This chapter will present the data that have been collected through the in-depth interview with four customers, who are experienced users of online shopping. The data will be presented according to the research questions and the variables identified in the frame of references along with detailed descriptions to provide a detailed idea of each issue raised in the interview.

5.1 Case One: Respondent A

The first case study was conducted through a face-to-face in-depth interview with respondent who is working at Luleå University of Technology, Sweden. He is 32 years old and originally comes from China. Here respondent is identified as respondent A. The interview was conducted in his office, F-Building, Luleå University of Technology. He has been living in Sweden five years. He has been using Internet about ten years and online shopping for about five years. He has bought lots of things from Internet. For example, he bought a series of books “Harry Potter I-V” from the online shop “www.amazon.com”, a laptop computer from the online shop “www.zepto.se”, a monitor and a display card with TV-out for a desktop computer from the online shop “www.itbutikken.se”, a car from the online shop “www.blocket.se”, many tickets from the online shops “www.sas.se”, “www.flynodic.se”, “www.aitalian.com”, “www.kiloy.se”, and “www.jetweb.se”, and some cosmetics for his wife from the online shop “www.sasa.com”.

He concluded that he had very nice online shopping experiences in most cases except for the boring experience with the online shop called “www.zepto.se”, which was the online shop where he bought his laptop, were not good enough. The reasons are that (1) “www.zepto.se” has not provided enough choices for him to compare the prices and configurations of the laptops from the different companies. (2) During the ordering process, he changed the standard configurations of the laptop, which he wanted to buy, to the self-defined configuration. For example, he increased the memory of the standard laptop and changed the CD-ROM of the standard laptop to DVD-/+writer. The online shop failed to give him the correct order. Although after several rounds of communications, the problems are solved, he does not think it is a happy online shopping experience. (3) After he received the products, i.e. laptop, he found that there were some problems though they were not severe problems. He tried to contact the company through email and the feedback page of the online shop. However, the online shop had not answered him until he called them by telephone.

In the following, it will be discussed, according to respondent A’s experiences, how the website design, reliability, responsiveness, trust, and personalization affect the perceived e-service quality in online shopping.
5.1.1 Website Design
During the interview, Respondent A mentioned that it was very important for him to know where he was and where he was going through a website’s navigation during the visit. He stressed that if he divided the importance of the factors of the website design into five classes from the least importance to the most importance, he would rank this factor as 5, i.e. one of the most important factors in the website design. He further explained that only if he knew where he was and where he was going, he could have a clear picture of the online shop, which then attracted him to further surf on the online shop. In other words, the factor is the premise for him to purchase any products from the online shop. Besides, he thought it was also significant for him to find the information, which he wanted, and understand the information for the perceived e-service quality in online shopping. Only if he can find the product, which he wants, he has the possibility to buy this product. Additionally, respondent A described only if he could understand the information of the product, e.g. the introductions, functions and advantages of the product, he could know if the product in this online shop satisfied his requirements and if the price was competitive compared with other products.

In his opinions, the search engine of a website is the “heart” of an online shop. With the well-performing search engine, he can easily find the product, which he is interested on, and its related information. The friendly link and fast as well as logical maneuverability together with the well-performing search engine will attract him to surf on the online shop. Besides, the friendly links can also give him more choices.

Furthermore, Respondent A explained that the images of the products on the website would help him have some ideas of the products. As he described above, he had bought a car from an online shop. At that time, he was only interested on the advertisements with the images of cars. He then said, “The background of the web pages should be consistent with the other information on the pages”. Usually, he does not like the fus cous background. He further stressed that the use of certain colors would make the online shop attractive. But he expressed that “My eyes are not used to the too colorful web pages”. In his opinion, the well structured website will provide him with a good navigation.

After that, respondent A pointed out that the website should provide the suitable contents. Otherwise, he will have the feeling that he is cheated by the online shop. If the website provides special contents, the website will become special and deeply impress him. In addition, he said, “Timely, informative and user-friendly database are important for the online shops”. Timely updated database gives him the feeling that the online shop follows the steps of era and concerns his needs. Informative database gives him more choices so that he can select out the information, which he wants. User-friendly database makes it easy to maneuver each action on the online shop. Besides, he discussed the suitable linkages would guide him to the product or the information, which he wanted. Respondent A further thought the network connection speed was far more important than any other factors. If the connection speed is too slow, he will lose the patience to
look through the website, say nothing of buying products from the online shop.

Eventually, respondent A pointed out the online shop should work for 24 hours, since one of the most important advantages of the online shop compared with the traditional shop was that he could visit, select and purchase the products, which he was interested on, at any time instead of only office time. He said, “It is reasonable for some kinds of the online shop, e.g. the internet bank and the online shop for booking thickets, to work for 24 hours”.

5.1.2 Reliability

Regarding the issue of the reliability, respondent A firstly said, “the information provided on the website should be accurate”. If he finds the product which he buys from the online shop is different from that introduced on the online shop, he will think he is cheated by the website. He will never buy any products from the website again or at least he will be more cautious in the next time. He may also tell his terrible experiences on the online shop to his friends. Furthermore, if the product which he receives is different from that he orders from the website, he will not believe in the online shop and may probably not buy any products from the online shop any longer. As he mentioned previously, he have bought a laptop from the online shop “www.zepto.se”. The memory, which he received, was different from that he ordered. After several rounds of communications, he finally got the right memory. But it wastes both him and the online shop a lot of time. So he thought the online shop had given him a bad impression.

Then, he indicated the online shop should deliver the products or services as soon as possible or at least following the schedule, which they published online. After he has ordered a product, he is expecting to receive it as soon as possible. During the transporting process, the online shop should trace where the product is delivered and timely inform him where the product is. After all, it is a terrible experience to blindly wait for something. After that, he thought that it was important for the online shop to keep his personal information secure. He said, “Compared with the traditional shop, one of the disadvantages of the online shop is the security”. He is always worrying if his personal information in the online shop will be revealed or misused, especially the finance information. Besides, it is also not a nice experience to receive a lot of advertisements if his email address is disclosed. Finally, he thought it was also significant that the online shop should keep its promise.

5.1.3 Responsiveness

Respondent A firstly stressed that the online shop should provide the services to collect his information, e.g. through the feedback page or form. Then, he indicated it was important that the online shop responded to him promptly by email and telephone if some problems occurred. As for the SMS (short message send) or the online communication, he thought they were not the popular ways to solve the problems. After that, he explained that if he gave suggestion to an online shop, he hoped that his suggestion was considered and reflected on the online shop, instead that the online shop only responded him promptly by email, SMS, Tel or online communications.
Furthermore, respondent A expressed that if he had ever become a customer of an online shop, the online shop should regularly send him questionnaires to collect his suggestions. Besides, he will have a positive opinion on the online shop if its navigation speed is fast. Otherwise, he will lose the patience to do any further things on the online shop. If an online shop provides online guarantees for products, which sell in the online shop, it will make him believe in the online shop and have the opinion that the online shop also considers his benefits. Finally, he mentioned that after he sent his requests to an online shop, he always expected that the online shop could respond his requests as soon as possible. If it takes a long time for the online shop to answer him, he will lose the interests on the online shop after several times of this kind of delay.

5.1.4 Trust
Regarding the dimension of trust, respondent A firstly pointed out that if an online shop had a good reputation, it would be easy for him to make decisions to buy products from the online shop as long as he could find the product, which he needed and the price of the product was acceptable. If he has ever bought something from an online shop before and had a happy experience in the online shop, he will first choose the online shop if he want to buy similar things at next time. Then, he thought that “very comfortable graphics and colors” were not so important for the trust since in his opinion, “very comfortable graphics and colors” should be classified into the dimension of the “website design” instead of the “trust” and they did not affect the trust.

After that, he mentioned it was significant that the online shop provided the information about policies/guarantees on the website. In this case, he could easily make the decision to buy the products from the website since he could return the product without any charge if he found the product was not good for him. Moreover, it will also help him believe in the online shop. Besides, respondent A stressed the background information would help him know the online shop so it was also important for the trust. Finally, respondent A indicated the online shop should provide the necessary and clear information, e.g. the company physical locations, telephone, fax, register mark, register name, register number, etc, so that he could find the company if any troubles happened.

5.1.5 Personalization
Respondent A firstly emphasized that the individual attention was important since he would feel that he was a VIP of this online shop, and that the personal acknowledgements which customers note from online stores and the availabilities of message areas for customers to make comments and suggestion were also important for him. It would be easy for him to buy products from this online shop at the next time. Probably, he would also introduce this online shop to his friends.

After that, he said, “It is necessary that the online shop should give different customers different services according to their different needs”. In this case, he would feel that he was special in the online shop. Ultimately, he thought that it was also very important that the online shop satisfied the customer individual need. If the online shop satisfied his needs, the online shop would steadily
become his partner. In the next time, if he wants to buy something, he will firstly check if this online shop can satisfy his needs. Only when this online shop cannot satisfy his needs, he will choose other online shops.

5.2 Case Two: Respondent B

The second case study was conducted through a face-to-face in-depth interview with respondent who is a master student at Luleå University of Technology, Sweden. She is 24 years old and comes from Germany. Here respondent is identified as respondent B. Respondent B has been living in Sweden for more than two years. She has been using Internet about eight years and the online shopping for two years. She has bought lots of things from Internet. Especially, she described that she bought many tickets from the online shop called “www.sas.se”, “www.hlx.com”, “www.Lufthansa.com”, “www.Travel-overland.com”, as well as “www.ryan-air.com” and some athletic sport goods (e.g. ski shoes) from the website called “www.sport-conrad.de”. However, she pointed out she did not like the website called “www.ryan-air.com”, since sometimes she was lost on the website. She meant the website did not have the standard design like others.

Subsequently, it will be discussed how the website design, reliability, responsiveness, trust and personalization affect the perceived e-service quality in online shopping according to respondent B’s experiences.

5.2.1 Website Design

Firstly, in respondent B’s point of view, she should be able to find the way on the website. Thus, it was very important for her to know where she was and where she was going on the website for the perceived e-service quality in online shopping. When she visited an online shop, she started usually from one side to choose products then went to another side to pay the money. If she could not find the road and did not know where she was, she would be lost and then bought nothing. Then, she thought that it was very important for her to find the information that she wanted and understand the information on the website for the perceived e-service quality in online shopping. Respondent B emphasized that she should understand the language of the online shop, i.e. German or English and the language should follow her lever. If the website uses very complicated sentences, or a lot of words that she does not know, maybe she will leave. She likes the clear and simple language. After that, she expressed that if she could not find the information, she would become lost and then switches to another website. In her point of view, the fast and logical maneuverability on the website was significant for the perceived e-service quality in online shopping. But she does not like using the search engine, since she has bad experiences with it. She further mentioned that the search engine couldn’t sometimes go to points.

In addition, respondent B thought the images, backgrounds, colors, structures/layouts of the website were significant for the perceived e-service quality in online shopping, but the premise
was that those things should not disturb her eyes. If she is looking for the clear information, she
likes the normal background, i.e. the light color instead of the intensive color. Respondent B
further mentioned that all of those factors should relate to the information or contents on the
website itself. Besides, she emphasized the suitable and special contents were the reasons why she
visited the website. She said, “I have never gone there only for funny. I visit the website since I
want to find the information that I am looking for”. Regarding the database, she expressed: “Yes,
of course! The timely, informative and user-friendly database on the website is important for the
perceived e-service quality in online shopping”. Since she goes to the website for the specific
information, if the links to the category are wrong or it takes lots of clicks for her to go to the
points, she may be lost and then leave the website.

Respondent B further stressed that the suitable linkage would help her find the information, which
she needed. Thus, the suitable linkages/choices were important. Additionally, she thought that the
network connection speed was also very important. In her words, “it should be fast”. Finally,
respondent B mentioned the online shop should open for 24 hours, although usually she was
sleeping and need not use it at that time. But sometimes, she maybe used it in the middle night of
the day, for example buying a gift for her friend. Moreover, the people who traveled a lot might
use the online shop working for 24 hours more often.

5.2.2 Reliability

In respondent B’s point of view, it is significant for the perceived e-service quality in online
shopping that the information provided on the website is accurate. When she planned to buy
products from the online shop, she could only see the pictures of the goods. She must rely on the
information on the website to make her decisions. Then she mentioned that when she received the
ordered product, she would like to check if the product was the same as that she had seen on the
website, i.e. shape, function, etc. She further stressed that it was really important for the online
shop to fulfill customers’ orders correctly for the perceived e-service quality in online shopping. If
she got the wrong order, maybe at the first time she would not mind in the case that the online
shop paid the delivery fee or what else. If this kind of thing happened several times, she would
never buy anything from this online shop, again.

Moreover, respondent B emphasized it was important for the perceived e-service quality in online
shopping that the online shop delivered the products or services promptly but it also depended on
the product itself. If it is a CD or book, she will expect that the online shop deliver them fast, for
example, one day or two days. If the delivering crosses countries, she can wait a little bit longer
time. If it is a big product (e.g. a pair of skies), she will never mind that it takes one week or two
weeks, but the products should be intactness. Besides, she also indicated that it was very
significant for the perceived e-service quality in online shopping that the online shop kept her
personal information secure. If an online shop has the problem with the security, she will scare and
will not use the online shop any more. Instead, she will go somewhere else. Eventually, she
pointed out that the brand also affected the reliability for the perceived e-service quality in online
shopping.

5.2.3 **Responsiveness**  
Firstly, respondent B thought it was really crucial for the perceived e-service quality in online shopping that the online shop provided the services of customer inquiries. If the online shop has problems with those, she will leave. If the problems happen after the purchase, she will call/email them to solve the problem. Then, she indicated that it would be nice that the online shop retrieved her feedback and collected her suggestion but she did not think those were important for the perceived e-service quality in online shopping, since she had never minded it.

After that, respondent B emphasized that the navigation speed was very important. In her words, “It should be fast”. Besides, she though that it was good, necessary and still important for the online shop to arrange for the online guarantees for the perceived e-service quality in online shopping. Finally, she expressed that if she emailed/called the online shop when a problem happened, she expected the quick response by email since she did not like the shop to know her telephone number.

5.2.4 **Trust**  
In respondent B’s point of view, if the online shop has a good reputation and she wants to buy the products/services, probably she will use the online shop. Then, she described she would be influenced by somebody else. For example, if her friends always say an online shop is very good, she will gradually become to trust the online shop. Moreover, if she is a loyal customer of an online shop, she will of course trust it. After that, she indicated that if an online shop had very comfortable graphics, colors and very good designs, she would think this online shop owns a very good firm, which would help her trust the online shop.

In addition, respondent B accentuated that it was good, necessary and still important for the perceived e-service quality in online shopping that the online shop provided the information about policies guarantees but she had never read it. Moreover, she thought the background information of an online shop was not so significant for her since she had never minded it. Ultimately, she stressed that it was very important for the perceived e-service quality in online shopping that the online shop provided the necessary and correct information, since the necessary and correct information would help her shop online.

5.2.5 **Personalization**  
Regarding the dimension of personalization, respondent B pointed out that the individual attention, the personal acknowledgements which customers note from online stores, and the availabilities of message areas for customers to make comments and suggestion were not so important for the perceived e-service quality.

After that, Respondent B stressed that it was important for the online shop to give each customer
personal services. For example, if she wants to buy a book but the online shop gives her some suggestion and persuades her to buy another book depending on her personal information, maybe she will have a try. In her words, “Sometimes, customers do not know what they really need”. Thus, in this case, she hopes the online shop can give her some suggestions depending on her personal information. Finally, she expressed that it was crucial that the online shop satisfied her individual need.

5.3 Case Three: Respondent C

The third case study was conducted through a face-to-face in-depth interview with respondent who is an international exchange student at Luleå University of Technology, Sweden. He is 23 years old and comes from Spain. Here respondent is identified as respondent C. He has been living in Sweden for more than half years. He has been using Internet about eight years and online shopping for four years. Similar to respondent B, he has also bought lots of tickets from the online shop called “www.sterling.dk”, “www.bussagods.se”, and “www.sas.se”. He mentioned it was difficult for him to use “www.bussagods.se”, since the structure of the website was not good enough. He further stressed it was also difficult to find information in “www.sas.se”, since he cannot understand lots of Swedish.

Below, it will be presented how the website design, reliability, responsiveness, trust, and personalization affect perceived e-service quality in online shopping on the basis of respondent C’s experiences.

5.3.1 Website Design

When respondent C discussed the issue of the website design, he thought it was quite important for him to know where he was and where he was going on the website. He further explained that sometimes it was more important for him to know where he was going than where he was. Then, he described that it was very significant for him to find the information that he wanted and understand the information on the website for the perceived e-service quality in online shopping. He also indicated that the language was important for the perceived e-service quality in online shopping. For him, the website should at least include English. After that, he stressed that it was meaningful that the website provided him the logical maneuverability on the website for the perceived e-service quality in online shopping, since it was easy for him to move. Besides, he expressed that, however, it was not so momentous that the website provided him well-performing search engine and offered fast and logical maneuverability on the website for the perceived e-service quality in online shopping since he had never used it during shopping.

Moreover, respondent C mentioned the images, backgrounds, colors, structures/layouts of the website were important for the perceived e-service quality in online shopping. If they are good, he maybe be attracted him to visit the online shop. In addition, he stressed that the suitable and
special contents were really important. In his words, “It should be easy to find the suitable contents”. Furthermore, he pointed out that he must rely on the information on the website to make choice. In this case, the more things the website offers to him, the more choices he can have. He also stressed that it was very important for the perceived e-service quality in online shopping that the online shop had timely, informative and user-friendly database on the website. In his words, it is good that the information is updated frequently. If the website provides enough information, it is easy for him to pick up what he likes. User-friendly database can help him find the information easily.

Respondent C also showed it was influential for the perceived e-service quality in online shopping that the website provided the suitable linkage. He thought that the suitable linkage should be easy to use, which would help him find the information very quickly. Furthermore, he emphasized that the network connection speed was extremely important for the perceived e-service quality in online shopping. When he looks for something on the online shop, he does not like to wait if the speed of the network connection is slow. At last, in his point of view, it is significant for the perceived e-service quality in online shopping that the online shop works for 24 hours since one of the advantages of the online shop is that it could open for 24 hours one day compared with the traditional shop.

5.3.2 Reliability
Respondent C pointed out that it was very significant for the perceived e-service quality in online shopping that the information provided on the website was accurate. If he discovered that the products he bought were different from the one, which he really wanted, he would be disappointed and then decided not to visit this website, again. Then he indicated that it was crucial for the perceived e-service quality in online shopping that the online shop fulfilled his orders correctly. If an online shop cannot fulfill his order correctly, he will never buy anything else from this website, again.

After that, he emphasized that it was significant for the perceived e-service quality in online shopping that the online shop delivered the products or services promptly. At least the online shop should deliver the products following the promised time. For example, he does not like to receive the product after seven days but the online shop says that he will receive it after two days. Finally, he showed that it was crucial that the online shop kept his personal information secure on the website. He further pointed out that he couldn’t control if his personal information was secure, but he thought the online shop should at least make his financial account secure. Otherwise, he will never go to the online shop again. However, if different companies share his email, it does not matter.

5.3.3 Responsiveness
Respondent C emphasized that it was influential for the perceived e-service quality in online shopping that the online shop provided the service about customers’ inquiries. These kinds of
services will help customers to know more of the products, which they are interested on. Then, he thought if the online shops provided some helps, e.g. answering the customer questions, they should answer customers very quickly. After that, he indicated that it was more important for the online shop than the customers that the online shop retrieved the customers’ suggestion.

In addition, he stressed the navigation speed was very important for the perceived e-service quality in online shopping. If the navigation speed is slow, he will switch to another website. Moreover, he pointed out that it was crucial for the online shop to arrange for online guarantees. In this case he will be more confidential in the website and it is easy for him to make choices. Ultimately, in his point of view, it was important for the perceived e-service quality in online shopping that the online shop provided a quick response to his requests. When he asks some questions, he hopes the online shop can answer him as soon as possible since the answers may be important today but not in the next day.

5.3.4 Trust
When we talked about the dimension of trust, respondent C accentuated when he bought products from an online shop, he usually did not know the reputation of the online shop. But he trusts the online shop that has a good reputation. He further pointed out that the reputation of the offline company was also important. If he knew the offline company was creditable, he would also trust the online shop of the company.

If an online shop satisfies his request each time, he will become a loyal customer of the online shop and trust it. Then, he pointed out that it was significant for the perceived e-service quality that the online shop had the very comfortable graphics and colors, since if the website had those things, he would think this company put lots of money on this website and this company had a good reputation, which would help him to trust the online shop.

After that, respondent C mentioned it was momentous for the perceived e-service quality in online shopping that the online shop provided the information about policies/guarantees on the website. If the online shop provides this kind of information, he will think the online shop shows all the points to him. He will read the policies/guarantees if he really wants to buy products from the online shop. Besides, he indicated the background information was not so important, because he had never minded if he could find the background information of the online shop. In addition, he further described that it was significant for the perceived e-service quality in online shopping that the shop provided the necessary and correct information on the website. In the end, he said that it was easy for him to understand the product if the online shop provided the necessary and right information.

5.3.5 Personalization
Regarding the issue of personalization, respondent C stressed that it was not meaningful that the online shop provides individual attention, the personal acknowledgements, which customers note
from online stores and the availabilities of message areas for customers to make comments and suggestion although it is actually more useful and important for the company.

After that, respondent C described that it was very important for the perceived e-service quality in online shopping that the online shop should give all the customers different needs if they needed. He said: “of course, it should at least fulfill my needs”. Besides, he pointed out depending on the degree that the online shop fulfilled his need, he would decide if he would leave this online shop or not. Finally, he thought that it was crucial for the perceived e-service quality in online shopping that the online shop satisfied his individual need. In his words, if the online shop satisfied his needs, he would appreciate it.

In respondent C’s point of view, the price is also a very important dimension of the perceived e-service quality. He further explained that if the price of the same product was cheaper in the online shop than the offline shop, maybe more people would visit the online shop and then buy products from the online shop.

5. 4 Case Four: Respondent D

The fourth case study was conducted through a face-to-face in-depth interview with respondent who is working as an instructor / Ph.D. Candidate in Luleå University of Technology, Sweden. He is Swedish, 43 years old. Here respondent is identified as respondent D. He has been using Internet about eleven years and online shopping for eight years. He have bought some books from Swedish online shops and bought some services from “www.seb.se”. He mentioned some websites presented poor structures and layouts, from which it was difficult for him to find the information.

In the following, it will be discussed how the website design, reliability, responsiveness, trust and personalization affect the perceived e-service quality in online shopping by reviewing respondent D’s experiences.

5.4.1 Website Design
Firstly, respondent D pointed out it was important for the perceived e-service quality in online shopping to know where he was and where he was going on the website, since he would follow the trace of the website to find the information. Then, he accentuated it was crucial to find the information that he wanted, and understand the information. After that, he explained that he had bad experiences with the search engine in online shops. Thus, in his opinion, the search engine was not so important but it was important for the online shop to offer the fast and logical maneuverability.

Besides, respondent D insisted that the structures/layouts of websites were significant. However, he thought that the images, backgrounds and colors were not so important. In his opinion, it is
vital for the perceived e-service quality in online shopping that the online shop provides the suitable or special contents, since the more contents the website offers to him, the more choices he can have. Furthermore, he described that it was not so important for perceived e-service quality in online shopping that the online shop had timely, informative and user-friendly database, since he had never cared about it. He further emphasized that it was influential for the perceived e-service quality in online shopping that the website provided the suitable linkage, because, with this, he could know how to buy products or services from the online shop.

In addition, respondent D also mentioned that he had no patience to wait for a long time. If the connection speed or navigation speed is slow, he will leave the online shop. Finally, he added the online shop working for 24 hours, provided him with great conveniences to surf on the online shop.

5.4.2 Reliability
Regarding the issue of reliability, respondent D firstly emphasized it was important for the perceived e-service quality in online shopping that the information provided on the website was accurate. Otherwise, he would switch to another website. Then, he insisted that it was vital for the perceived e-service quality in online shopping that the online shop fulfilled his orders correctly. If an online shop fulfills his orders incorrectly, he will not believe the online shop.

After that, he thought it was very important for the perceived e-service quality in online shopping that the online shop delivered the products or services promptly. In his words, the online shop should deliver the products based on their supposed time schedule, neither fast nor slow. Finally, in his point of view, it was very significant to keep customer personal information secure for the perceived e-service quality in online shopping, but it also depended on what kinds of personal information.

5.4.3 Responsiveness
Respondent D thought in future more and more people would use the online shopping. Thus, it was important for the perceived e-service quality in online shopping that the online shop provided the service about customer inquiries on the web. Then, he said, “If I ask an online shop questions, it should reply me very quickly”. After that respondent D accentuated that it was not so meaningful for the perceived e-service quality in online shopping that the online shop retrieved the information, e.g. his suggestion, since he had never minded it. Ultimately, He thought it was momentous for the online shop to arrange for the online guarantees. It would increase his trust on the online shop.

5.4.4 Trust
Regarding the issue of trust, respondent D firstly pointed out that it was crucial for the perceived e-service quality in online shopping that the online shop had a good store reputation. If he is a loyal customer of an online shop, he will trust the company. He also thought that very comfortable
graphics and colors on the website were not so important for the perceived e-service quality in online shopping since had never cared about whether the website had very comfortable graphics and colors or not. On the contrary, it would make him believe the website that the online shop provided the information about policies/guarantees.

Furthermore, respondent D indicated that the background information of the online shop was also crucial for the perceived e-service quality in online shopping, since he could understand more about this online shop, e.g. the history of the online shop. In conclusion, he emphasized it was very meaningful for the perceived e-service quality in online shopping that the online shop provided the necessary information for him.

5.4.5 Personalization
Respondent D first explained that it was not so significant for the perceived e-service quality in online shopping that the online shop provides individual attention, the personal acknowledgements which customers note from online stores and the availabilities of message areas for customers to make comments and suggestion since he had never minded it. Then, he said that if he wanted to buy a product which the online shop did not have, he would switch to another website instead of giving the suggestion to the online shop.

Additionally, he emphasized that the online shop should satisfy the customers’ different needs, which the customers required. Moreover, he added it was very influential for the perceived e-service quality in online shopping that the online shop satisfied his individual need as long as he needed it. If the online shop cannot satisfy his reasonable needs, he will never visit the online shop again. At last, respondent D stressed that it was crucial for the perceived e-service quality in online shopping that the information that he gave to the company was not misused. He does not like that his information goes everywhere.
Chapter 6 Data Analysis

In this chapter the data obtained in Chapter Five will be analyzed using the method called the within-case analysis, in which each case is compared with the previous studies. Then the data will be re-examined through the cross-case analysis, where the four cases are compared with each other.

6.1 Within-case Analysis - Case One: Respondent A

The first case study was conducted with respondent A, who was working as a research scientist at Luleå University of Technology, Sweden. He is 32 years old and comes from China. In the following, we will analyze how the five dimensions affect the perceived e-service quality on the basis of Respondent A's experiences using the within-case analysis.

6.1.1 Website Design

According to Kim and Lee (2002), website design describes the appeal of the user interface design presented to customers. Respondent A thought the navigation was very important for the perceived e-service quality since it was the premise for him to further explore on the online shop, have a clear picture of the online shop and purchase products from the online shop. The data enrich the studies (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002) regarding the navigation as an important factor of website design, i.e. it is important for the customers to know where they are and where they are going.

He also mentioned that the well-performing search engine would help him to find the product, which he was interested on, and its related information. Additionally, the fast and logical maneuverability would attract him to surf on the online shop. The obtained materials from respondent A support the theory that indicates that the websites with the adequate navigation quality consistently enable users to find what they want easily via a dependable and well-performing search engine offering the fast and logical maneuverability (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002).

During the interview, he further explained that the images of the product would help him to have some ideas of the products. Besides, he thought the well structured or laid website would provide him with a good navigation. All these data are related to the factors of the visual characteristics / appearances (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003), which are important for website design. Respondent
A also indicated the background of an online shop should be consistent with other information on the online shop. However, usually, he does not like the fuscous background although the use of certain colors will make the online shop more attractive. The data verify the studies arguing the aesthetic / e-scape (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005) are significant for website design.

In respondent A’s point of view, the website should provide the suitable contents. Otherwise, he will have the feeling that he is cheated by the online shop. If the website provides special contents, the website will become special and deeply impress him. According to D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), Kaynama and Black (2002), Madu and Madu (2002), and Santos (2003), the content is an influential factor of the website design for the perceived e-service quality in online shopping. Additionally, he said that timely updated database gives him the feeling that the online shop follows the steps of era and concerns his needs. Informative database gives him more choices so that he can select out the information, which he wants. User-friendly database makes it easy to maneuver each action on the online shop. These data are related to Wigand’s (1997) theory that the database of the website design should be timely, informative, and user-friendly.

In his point of view, the suitable linkages will guide him to the product or the information, which he wants. The data support the statement (Madu and Madu, 2002; Santos, 2003) arguing that suitable linkages / choices can make visitors easily find the information in the website and too many choices may not necessarily mean a good thing and could lead to confusions. He also thought the network connection speed was far more important than any other factors. If the connection speed is too slow, he will lose the patience to look through the website, say nothing of buying on the online shop. These data are related to the critical factor of the website design, which indicates that the network connection speed should be paid special attentions to in the website design (Dellaert and Kahn, 1999; Madu and Madu, 2002).

Finally, he indicated that one of the most important advantages of the online shop compared with the traditional online shop was that he could visit, select and purchase the products, which he was interested on at any time instead of only office time. He said, “It is especially important for some kinds of the online shop, e.g. the Internet bank and the online shop for booking thickets, to work for 24 hours”. He further added the online shop should add friendly links, it would attract him to surf online and give him more choices. However, there is no theory, which takes the online shop working for 24 hours, and friendly links as important factors of website design.

Table 11 summarizes how website design affects the perceived e-service quality in online shopping according to respondent A’s experiences.
Table 11: Respondent A’ Opinions on How Website Design Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Website Design (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005)</th>
<th>Measurement Criteria for the Dimensions</th>
<th>Experiences of E-service Quality according to Respondent A</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Navigation (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002)</td>
<td>Know where they are and where they are going</td>
<td>Navigation: Help him to have a clear picture</td>
</tr>
<tr>
<td></td>
<td>Well-performing search engine</td>
<td>Navigation: Help him to find the product easily</td>
</tr>
<tr>
<td></td>
<td>Fast Logical manoeuvrability</td>
<td>Navigation: Attract him to surf on the online shop</td>
</tr>
<tr>
<td>● Visual characteristics/appearances (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Images</td>
<td>Important: Have some ideas of the product</td>
</tr>
<tr>
<td></td>
<td>Backgrounds</td>
<td>Important: Fuscous background and too colorful website distribute his eyes</td>
</tr>
<tr>
<td></td>
<td>Colors</td>
<td>Important: Provide him with a good navigation</td>
</tr>
<tr>
<td>● Aesthetic/e-scape (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005)</td>
<td>How information is presented through the use of colors, layouts, pictures, and font sizes as well as styles</td>
<td>Important: Background should be consistent with other information on the website. Suitable use these makes the website more attractive</td>
</tr>
<tr>
<td>● Content (D’Angelo and Little, 1998; Doll and Torkzadeh, 1998; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Madu and Madu, 2002; Santos, 2003).</td>
<td>Suitable content</td>
<td>Important: Let him believe in the online shop</td>
</tr>
<tr>
<td></td>
<td>Specific content</td>
<td>Important: Deeply impress him</td>
</tr>
<tr>
<td>● Design of database (Wigand, 1997)</td>
<td>Timely</td>
<td>Important: Give him the impression that the online ship follows the step of era and concerns his needs</td>
</tr>
<tr>
<td></td>
<td>Informative</td>
<td>Important: Provide him more choices</td>
</tr>
<tr>
<td></td>
<td>User-friendly</td>
<td>Important: Easy to manoeuvre actions</td>
</tr>
</tbody>
</table>
6.1.2 Reliability

In the e-commerce contexts, Reliability often refers to a functional quality dimension and at the same time to the reliability of the information and contents provided on the website (Semeijn et al., 2005). Respondent A mentioned the information provided on the website should be accurate. If he finds the actual product is different from the introduction on the online shop, he will think he is cheated by the website and leave. Doll and Torkzadeh (1998), Yang et al. (2004) and Semeijn et al. (2005) indicated that it was crucial for the perceived e-service quality in online shopping that the information provided on the website was accurate. Then, respondent A discussed if the product which he received was different from that he ordered from the website, he would never believe in the online shop and might probably not buy any products from the online shop any longer. Those data are related to the theory that it is a meaningful factor of reliability to fulfill customers’ orders correctly (Parasuraman et al., 1988; Kim and Lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun et al., 2004; Yang et al., 2004).

After that, respondent A mentioned that the online shop should deliver the products or services as soon as possible or at least following the schedule, which they promised online. After he orders a product, he is expecting to receive it as soon as possible. Those data are consistent with the theory that the reliability represents the ability of the website to deliver promptly (Parasuraman et al., 1988; Kim and Lee, 2002) with the promised time (van Riel et al., 2003). During the interview, respondent A described it was critical that the online shop kept his personal information secure. He said, “Compared with the traditional shopping, one of the disadvantages of the online shop is the security of the online shop”. He is always worrying about if his personal information in the online shop will be revealed or misused, especially the finance information. He thought that it was also not a nice experience to receive a lot of advertisements if his email address in that online shop is disclosed. Those data verify the theory that the reliability represents the ability of the website to keep the personal information secure (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004).
Eventually, respondent A added that the online shop should keep its promise to the customers. Those data are related to one of the factors of the reliability, i.e. the fulfillment of the customer promises (Yang et al., 2004). He further mentioned that during the transporting process, the online shop should trace where the product was delivered and timely informed him. As far as we know, there is no corresponding theory, which regards those a new factors as the variables of reliability.

Respondent A's experiences on the topic of how reliability affects the perceived e-service quality in online shopping are presented in Table 12.

### Table 12: Respondent A’ Opinions on How Reliability Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Reliability</th>
<th>Important/ Should be accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided on the website be accurate</td>
<td>Important</td>
</tr>
<tr>
<td>Fulfill orders correctly</td>
<td>Important/ Should deliver orders correctly</td>
</tr>
<tr>
<td>Deliver promptly</td>
<td>Important/ Deliver orders as soon as possible</td>
</tr>
<tr>
<td>Keep personal information secure</td>
<td>Important/ Not reveal or misuse personal information, especially the finance information</td>
</tr>
<tr>
<td>Fulfills of promises</td>
<td>The online shop should keep its promise</td>
</tr>
<tr>
<td>Not found theory</td>
<td>The online shop should trace the transporting process and timely inform him</td>
</tr>
</tbody>
</table>

#### 6.1.3 Responsiveness

Responsiveness describes how often an online store voluntarily provides services to its customers. The services, which are important to customers, are, for example, customer inquires, information retrievals and navigation speeds (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002). Regarding the issue of the responsiveness, Respondent A thought the online shop should provide the services to collect his information and it was significant that the online shop to response him promptly by Email or Telephone if some problems occurred, which was related to the theory that
the responsiveness could be measured by providing the appropriate services/information to customers when a problem occurred, e.g., customer inquires (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003).

Respondent A also mentioned that if he had ever become a customer of an online shop, the online shop should regularly sends him questionnaires to collect his suggestions. If he gives suggestion to an online shop, he hope that his suggestion is considered and displayed on the online shop instead of only answering him promptly by email, SMS, Tel or online communications. Those data confirm the theory that the responsiveness describes how often an online store voluntarily provides services (e.g. information retrieval) that are important to its customers (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002).

In the interview, respondent A further explained that he would have a positive opinion of the online shop if its navigation speed was fast. Otherwise, He will lose the patience to do any further things on the online shop. According to Parasuraman et al. (1988), Yang (2001), and Kim and Lee (2002), the responsiveness describes how often an online store voluntarily provides services (e.g. navigation speed). Additionally, in respondent A's point of view, if an online shop provides online guarantees for the products, which sells in the online shop, it will make me believe in the online shop and have the opinion that the online shop also considers his benefits. The data are related to Wang’s (2003) theory that the “responsiveness” measures the ability of a company to provide the appropriate information to customers when a problem occurs, a mechanism for handling returns, and an arrangement for online guarantees.

In the end, respondent A added that after he sent his requests to an online shop, he always expected that the online shop could response him as soon as possible. If it takes a long time for the online shop to answer him, he will lose the interests on the online shop after several times of this kind of delay. These data are related to the theory (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004) that a quick response to the requests is likely to increase the perceived convenience and diminish the uncertainty, and is also an important way for companies to show that they are customer-oriented and act benevolently toward customers. Therefore, customers expect online stores to respond to their inquiries promptly and customers have identified a fast response as an element of high-quality services.

On the basis of respondent A’s experiences, it is listed in Table 13 that how responsiveness affects the perceived e-service quality in online shopping.
Table 13: Respondent A’ Opinions on How Responsiveness Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Responsiveness</th>
<th>Respondent A’s Opinions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the appropriate service/information to customers when a problem occurs i.e. customer inquires. (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003)</td>
<td>Important/ Should provide the services to collect his information</td>
</tr>
<tr>
<td>Information retrieval (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important/ Should regularly send him questionnaires to collect his suggestion/ Hope his suggestion is considered and displayed</td>
</tr>
<tr>
<td>The navigation speed (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Fast navigation speed</td>
<td>Make him have a positive opinion</td>
</tr>
<tr>
<td>Low navigation speed</td>
<td>Make him lose patience</td>
</tr>
<tr>
<td>Arranging for online guarantees (Wang, 2003)</td>
<td>Important/ Make him believe in the online shop Thought the online shop consider his benefits</td>
</tr>
<tr>
<td>A quick response to requests (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004)</td>
<td>Important/ Expect the online shop response his requests as soon as possible</td>
</tr>
<tr>
<td>Delays occur</td>
<td>Lose the interests</td>
</tr>
</tbody>
</table>

6.1.4 Trust

Trust is defined by Kimery and McCard (2002) as the customers’ willingness to accept an online transaction on the basis of their positive expectations regarding the online store’s future behaviors. At the start, respondent A indicated that if an online shop had a good reputation, it would be easy for him to make the decisions to buy products on the online shop as soon as he found the product which he needed and whose prices were acceptable. He further mentioned that if he had ever bought something from an online shop before and had a happy experience with the online shop, he would first choose the online shop if he wanted to buy similar things in the next time. All of those data are related to the theory that the pre-purchase knowledge / after-purchase knowledge including the store reputation (Egger, 2002; Madu and Madu, 2002) and customer loyalty (McCole, 2002) is an important factor affecting the trust. In respondent A’s point of view, the very comfortable graphics and colors were not so important for the trust, because he thought it was a factor of the website design affecting the perceived e-service quality.

Then, he commented it was meaningful that the online shop provided the information about policies/guarantees on the website. In that case, he can easily make the decision to buy products from the website since he can return the products without any charge if he finds the product is not
suitable to him. Moreover, it will also help him believe in the online shop. Besides, the background information would help him to understand the online shop so it was also significant for him. Finally, respondent A added that the online shop should provide the necessary and clear information, e.g. the company physical locations, telephone, fax, register mark, register name, register number, etc, so that he could find the company if any troubles happen. All of these data are related to the theory that the factor of the information provided by the store about their policies/ guarantees, background information and other information to the customers is important for the trust (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002).

How the trust affects the perceived e-service quality in online shopping is explained in Table 14.

**Table 14: Respondent A’ Opinions on How Trust Affects the Perceived E-service Quality in Online Shopping**

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Trust (Zeithaml et al., 2000; Loiacono et al., 2002; Madu and Madu, 2002; Parasuraman, 2002; Voss, 2003; Lee and Lin, 2005)</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pre-purchase knowledge/After-purchase knowledge (Egger, 2002; Madu and Madu, 2002; McCole, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Store reputation</td>
<td>Good reputation makes him easily decide to buy products</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Like to buy products</td>
</tr>
<tr>
<td>• Interface properties (Design of the user interfaces, i.e. the graphics and color) (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002)</td>
<td>Not so important/ Important factor of website design for perceived e-service quality</td>
</tr>
<tr>
<td>Information content (Urban et al., 2000; Egger, 2002 Madu and Madu, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Information provide by the store about their policies/ guarantees</td>
<td>Help him make the decision to shop/ Low risks</td>
</tr>
<tr>
<td>Background information about the company</td>
<td>Help him to know the online shop</td>
</tr>
<tr>
<td>Other information provided to the customers</td>
<td>Should provide necessary and clear information</td>
</tr>
</tbody>
</table>

6.1.5 **Personalization**

Personalization involves the individual attentions, the personal thanks which customers note from online stores, and the availabilities of a message area for customers making comments (Yang, 2001). Respondent A pointed out that the individual attention was important since he would feel that he was a VIP of this online shop, and that the personal acknowledgements which customers note from online stores and the availabilities of message areas for customers to make comments and suggestion were also important for him. This information is related to Huang and Lin’s (2005) that the personalization gives each customer a unique experience and Yang’s (2001) study introduced above.
Moreover, respondent A said, “It is very necessary that the online shop should serve different customers according to their different needs”. In this case, he will feel that he is special in this online shop. Besides he showed that it was also crucial for the online shop to satisfy the customers’ individual need. If the online shop can satisfy his needs, the online shop will steadily become his partner. In the next time, if he wants to buy anything, he will firstly check if the online shop can satisfy his needs. Only when this online shop cannot satisfy his needs, he will choose other online shops. Those data are related to the theory that the heart of the personalization is to satisfy the individual customers’ unique needs (Huang and Lin, 2005).

Based on respondent A’s experiences, it is schematically shown in Table 15 that how personalization affects the perceived e-service quality in online shopping.

**Table 15: Respondent A’ Opinions on How Personalization Affects the Perceived E-service Quality in Online Shopping**

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Personalization (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● Satisfy the individual customers’ unique needs’ (Huang and Lin, 2005)</td>
<td>Important/ Regard the online shop as a partner if it always satisfy his needs/ Purchase products on the online shop next time if it always satisfies his needs</td>
</tr>
<tr>
<td>● Individual attentions (Yang, 2001)</td>
<td>Important</td>
</tr>
<tr>
<td></td>
<td>Feel he is VIP</td>
</tr>
<tr>
<td>● Personal acknowledgements which customers note from online stores (Yang, 2001)</td>
<td>Important</td>
</tr>
<tr>
<td>● Availabilities of message areas for customers to make comments and suggestion (Yang, 2001)</td>
<td>Important</td>
</tr>
</tbody>
</table>

### 6.2 Within-case Analysis - Case Two: Respondent B

In this section, we will discuss how the five dimensions affect the perceived e-service quality in online shopping in the light of respondent B’s experiences using the within-case analysis. As introduced in the second case study in Chapter Five, respondent B is a master student, Luleå University of Technology, Sweden, who is 24 years old and comes from Germany.

#### 6.2.1 Website Design

Kim and Lee (2002) pointed out that the website design should describe the appeal of the user interface design presented to customers. In respondent B’s point of view, she should be able to find the way on the website. When she visits an online shop, she starts from one page to choose
products then goes another page to pay the money. If she cannot find the road, she will be lost and then buy nothing. The data support the researches (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002) on the navigation of the website, which should enable customers to know where they are and where they are going.

Besides, she thought the search engine was not so important but it was influential for the online shop to offer fast and logical maneuverability, since she did not like using the search engine and had bad experiences with it. Moreover, most of the search engines couldn’t go to points sometimes. These data are related to the theory arguing that the websites with the adequate navigation quality consistently enable users to find what they want easily via the fast and logical maneuverability (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002).

After that, respondent B emphasized the images, backgrounds, colors and structures/layouts of the website were significant but the premise was that those things did not disturb her eyes. These data are consistent with the theories (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003) indicating that the visual characteristics / appearances are important for the perceived e-service quality in online shopping. If she is looking for the clear information, she likes the normal background, i.e. the light color instead of the intensive color. She further stressed that the background should relate to the information on the website. The data support the ideas (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005) thinking the aesthetic/e-scape are is meaningful for the perceived e-service quality in online shopping.

In respondent B’s point of view, the suitable and special contents are the reasons why she visits the website. She said, “I have never gone there only for funny. I visit the website since I want to find the information that I am looking for”. The data is comparable to the theory described by D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), Kaynama and Black (2002), Madu and Madu (2002) and Santos (2003), which stresses that the content is an important factor of the website design for the perceived e-service quality in online shopping. She further commented that she went to the website for the specific information. If the links to the category are wrong or it takes lots of clicks for her to go to the points, she may be lost and will leave the website. The data verify the theory proposed by Wigand (1997) that the database on the websites should be timely, informative, and user-friendly.

After that, the participant B described that the suitable linkage would help her find the information, which she needed. The data support the studies conducted by Madu and Madu (2002) and Santos (2003), which reveal that the suitable linkages/choices can make visitors clearly know the information on the website and too many choices may not necessarily mean a good thing and
could lead to confusions. Besides, respondent B added that the network connection speed was far more important than anything else. The data are consistent with the theory that the website design should pay special attentions to the network connection speeds (Dellaert and Kahn, 1999; Madu and Madu, 2002).

Ultimately, in her opinion, the online shop should open for 24 hours. Although usually she is sleeping at nights and she does not need it, sometimes, she maybe uses it in the middle night of the day, for example, buying a gift for her friend. Moreover, for the people who travel a lot, they may use the online shops opening for 24 hours more often. However, it is regrettable that till this moment, we have not found the theory, which describes that the online shop should work for 24 hours.

Table 16 summarizes how website design affects the perceived e-service quality in online shopping according to respondent B’s experiences.

**Table 16: Respondent B’ Opinions on How Website Design Affects the Perceived E-service Quality in Online Shopping**

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Website Design (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005;)</th>
<th>Experiences of E-service Quality according to Respondent B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Criteria for the Dimensions</strong></td>
<td><strong>Experiences of E-service Quality according to Respondent B</strong></td>
</tr>
<tr>
<td>Navigation (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Know where she is and where she is going</td>
<td>Should find the way of the website/ Choose products from one side and pays money on another side</td>
</tr>
<tr>
<td>Not know where she is and where she is going</td>
<td>Cannot find the road / Lose and then buy nothing</td>
</tr>
<tr>
<td>Well-performing search engine</td>
<td>Not so important / Bad experiences</td>
</tr>
<tr>
<td>Fast and logical manoeuvrability</td>
<td>Important</td>
</tr>
<tr>
<td>Visual characteristics/ appearances (Images, Backgrounds, Colors, Structures/layouts). (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Important</td>
</tr>
<tr>
<td>Aesthetic/e-scape (How information is presented through the use of colors, layouts, pictures, and font sizes as well as style). (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005)</td>
<td>Important</td>
</tr>
<tr>
<td></td>
<td>Like the normal background</td>
</tr>
<tr>
<td></td>
<td>All of those factors should related to the information or content</td>
</tr>
</tbody>
</table>
6.2.2 Reliability

Semeijn et al (2005) concluded that the reliability often referred to a functional quality dimension and to the reliability of the information provided on the site in an e-commerce context. Respondent B described it was very significant for the perceived e-service quality in online shopping that the information provided on the website was accurate. When she planned to buy products, she could only see the pictures of the goods on the website. Thus, she must rely on the information on the website. After she received the product, she would like to check if the product was the same as that she had seen on the website. The data support the previous studies conducted by Doll and Torkzadeh (1998), Yang et al. (2004) and Semeijn et al. (2005), which indicate that it is very important that the website provided the accurate information.

Then, respondent B commented it was really meaningful for the perceived e-service quality in online shopping to fulfill her orders correctly on the website. If she receives the wrong order, maybe at the first time she will not mind if the online shop pays the delivery fee or what ever. However, if this kind of thing happens several times, she will never buy anything from this online shopping. Those data are consistent with the theory described by Parasuraman et al. (1988), Kim and lee (2002), Collier and Bienstock (2003), van Riel et al. (2003), Jun, et al. (2004), and Yang et al. (2004), that it is a crucial factor of the reliability for the perceived e-service quality in online shopping to fulfill orders correctly.

After that, respondent B indicated it was influential for the perceived e-service quality in online shopping that the online shop delivered the products or services promptly but it also depended on the products. The data support the studies conducted by Parasuraman et al. (1988), Kim and Lee (2002) and Yang et al. (2004), which arguing that the reliability represents the ability of the website to deliver the products promptly or within the promised time (van Riel et al., 2003). Besides, she emphasized it was crucial that the online shop kept her personal information secure. If the online shop has the problem with security, she will scare and not use this online shop any
more. These data verify the theories (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004) revealing that the reliability represents the ability of the website to keep the personal information secure.

Eventually, she stressed that the brand also affected the reliability although we had not found the theory regarding the brand as a variable of the perceived e-service quality in online shopping.

Respondent B’s experiences on the topic of how reliability affects the perceived e-service quality in online shopping are presented in Table 17.

Table 17: Respondent B’ Opinions on How Reliability Affects the Perceived E-service Quality in Online Shopping

| E-service Quality Dimension: Reliability (Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Wang, 2003; Yang et al., 2003; Jun et al., 2004, Lee and Lin, 2005) | Important / Rely on the information to make decisions if she will buy the products | Important | Never buy anything again if it has not fulfill her orders several times, but just one time | Important | Depend on the product | Important | Not use this online shop any more | Go somewhere else | Brand |
|---|---|---|---|---|---|---|---|---|---|---|
| Information provided on the website accurate (Doll and Torkzadeh, 1998; Yang et al., 2004; Semeijn et al., 2005) | Important / Rely on the information to make decisions if she will buy the products | Important | Important | Depend on the product | Important | Important |
| Fulfill orders correctly (Parasuraman et al., 1988; Kim and Lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun et al., 2004; Yang et al., 2004) | Important | Important | Important | Important | Important |
| Not fulfill orders correctly | Important | Important | Important | Important | Important |
| Deliver promptly/ within the promised time (Parasuraman et al., 1988; Kim and Lee, 2002; van Riel et al., 2003) | Important | Important | Important | Important | Important |
| Keep personal information secure (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004) | Important | Important | Important | Important | Important |
| Online shop has the problem of secure | Important | Important | Important | Important | Important |
| Not fond theory | Important | Important | Important | Important | Important |
Respondent B thought that it was really important for the perceived e-service quality in online shopping that the online shop provided the services about customer inquiries on the website. If any problems happen, she will call/email the online shop to solve the problem. All these data verify the theory that the responsiveness can be measured by providing the appropriate service/information to customers when a problem occurs i.e. customer inquiries (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003).

In her point of view, it was not so important that the online shop retrieved her feedback and collected her suggestion since she did not mind it. She further indicated the navigation speed was significant. According to the researches conducted by Parasuraman et al. (1988), Yang (2001), and Kim and Lee (2002), the responsiveness describes how often an online store voluntarily provides services (e.g. navigation speed). Furthermore respondent B thought that it was necessary that the online shop arranged for online guarantees on the website. The data are consistent with Wang’s (2003) study, which reveals that the “responsiveness” measures the ability of a company to provide the appropriate information to customers when a problem occurs, a mechanism for handling returns, and an arrangement for online guarantees.

Finally, respondent B pointed out that if a problem occurred, she expected the quick response from the online shop. These data confirm the theory (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004) that a quick response to requests is also an important way for companies to show that they are customer-oriented and act benevolently toward customers.

On the basis of respondent B’s experiences, it is listed in Table 18 (See P. 62) that how responsiveness affects the perceived e-service quality in online shopping.

### 6.2.4 Trust

According to Kimery and McCard (2002), the trust expresses the customers’ willingness to accept an online transaction, which is based on their positive expectations regarding the future online store behaviors. In respondent B’s point of view, if the online shop has a good reputation, she will trust the online shop. If she is a loyal customer, of course, she trusts the online shop. These data confirm the theory that the pre-purchase knowledge / after-purchase knowledge including the store reputation (Egger, 2002; Madu and Madu, 2002) and the customer loyalty (McCole, 2002) significantly affect the trust. If an online shop has very comfortable graphics, colors and good designs, she will think this online shop owns a very good firm, which will help her trust the online shop. These data reveal that the interface properties are crucial factors of the trust (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002).
Table 18: Respondent B’s Opinions on How Responsiveness Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Responsiveness</th>
<th>Important</th>
<th>Not so important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the appropriate service/information to customers when a problem occurs i.e. customer inquires. (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003)</td>
<td>Important</td>
<td>The problem happens after the purchase, she will call/email them to solve the problem</td>
</tr>
<tr>
<td>Information retrieval (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Not so important</td>
<td>Never mind it</td>
</tr>
<tr>
<td>The navigation speed (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>Arranging for online guarantees (Wang, 2003)</td>
<td>Important /Necessary</td>
<td></td>
</tr>
<tr>
<td>A quick response to requests (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004)</td>
<td>Important</td>
<td>Expect the quick response</td>
</tr>
</tbody>
</table>

After that, she thought it was important that the online shop provided the information about policies guarantees on the website. She further added it was not so influential that she could find the background information of the online shop since she did not mind it. Besides, she commented it was crucial that the online shop provided necessary information on the website since this information could help her shop online. These data are consistent with the previous studies (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002) on the factors of information contents, which indicate that the information about their policies/guarantees, the background information of the company, and the other information provided to the customers are significant.

Lastly, respondent B added the different kinds of advertisements would make her trust the online shop and then affect the perceived e-service quality in online shopping, which could also be regarded as significant factors of the trust. However, we have not found the theory supporting those data.

How trust affects the perceived e-service quality in online shopping is explained in Table 19 (See P. 63).

6.2.5 Personalization
On the basis of Yang’s (2001) work, the personalization refers to the individualized attentions, the personal thanks which customers note from online stores, and the availabilities of a message area for commenting customer questions. Respondent B pointed out the information mentioned above was not so important since she had never minded it.
Table 19: Respondent B’ Opinions on How Trust Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Trust</th>
<th>Pre-purchase knowledge /After-purchase knowledge (Egger, 2002; Madu and Madu, 2002;McCole, 2002)</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good store reputation/ Customer loyalty</td>
<td>Help her trust this online shop</td>
</tr>
<tr>
<td></td>
<td>Interface properties (Design of the user interfaces, i.e. the graphics and color) (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td></td>
<td>The online shopping has very comfortable graphics, colors, and very good designs</td>
<td>Think this online shop owns a very good firm</td>
</tr>
<tr>
<td></td>
<td>Help her trust this online shop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information content (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td></td>
<td>Information provide by the store about their policies/ guarantees</td>
<td>Good, necessary and still important</td>
</tr>
<tr>
<td></td>
<td>Background information about the company</td>
<td>Not so important / Never mind it</td>
</tr>
<tr>
<td></td>
<td>Other Information provided to the customers</td>
<td>Help her shop online</td>
</tr>
<tr>
<td></td>
<td>Not Found theory</td>
<td>Different kinds of advertisements</td>
</tr>
</tbody>
</table>

After that respondent B described it was crucial for the online shop to give each customer personal services. Actually, she hopes the online shop can give her some suggestion depending on her personal information. In her opinion, it is significant that the online shop satisfies her individual need. All of these data confirm the theory that the heart of the personalization is to satisfy the individual customer’s unique needs (Huang and Lin, 2005).

Based on respondent B’s experiences, it is schematically shown in Table 20 (See P. 64) that how personalization affects the perceived e-service quality in online shopping.

6.3 Within-case Analysis - Case Three: Respondent C

Here, it will be described that how the five dimensions affect the perceived e-service quality according to the respond C’s experiences using the method of the within-case analysis. As introduced in the third case study in Chapter Five, respondent C is an international exchange student at Luleå University of Technology, Sweden, who is 23 years old and comes from Spain.

6.3.1 Website Design

According to the previous study (Kim and Lee, 2002), in the website design, the appeal of the user interface design presented to customers is described. Respondent C thought it was quite important
for him to know where he was and where he was going on the website. He further pointed out sometimes it was difficult to know where he was going. The data support the studies (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002) addressing that the navigation of the website is important.

Table 20: Respondent B’ Opinions on How Personalization Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Personalization (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
</table>
| Individual attentions (Yang, 2001) | Not so important
Never mind it |
| Personal acknowledgements which customers note from online stores (Yang, 2001) | Not so important
Never mind it |
| Availabilities of message areas for customers to make comments and suggestion (Yang, 2001) | Not so important
Never mind it |
| Satisfy the individual customers’ unique needs (Huang and Lin, 2005) | Hope the online shop gives her some suggestion depending on her personal information
Happy to tell the online shop what she needs |

Then he showed that it was significant for the perceived e-service quality in online shopping that the website provided him with logical maneuverability on the website since it was easy for him to move. The data from respondent C are related to the studies on the website offering the fast and logical maneuverability (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002).

He further described it was not meaningful that the website provided him the well-performing search engine since he did not use it during shopping. Besides, he commented the good images, backgrounds, colors, sounds, and structures / layouts of the website might attracted him to visit the online shop. These data verify the previous studies stressing that the factors of the visual characteristics / appearances (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003) and the aesthetic/e-scape (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005) are important for the website design.

Moreover, respondent C stressed that suitable and special contents were really important. He further emphasized that he could only rely on the information on the website to judge if he would buy a product from the online shop. Thus, the more things the website offers to him, the more
choices he can have. The data support the studies conducted by D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), Kaynama and Black (2002), Madu and Madu (2002) and Santos (2003) arguing that the content in the website design is important for the perceived e-service quality in online shopping.

After that, he showed that it was good that the information in the database was updated very fast. If the website provides enough information, it is easy for him to pick up what he likes. User-friendly database can help him find the information easily. Those data verify Wigand’s (1997) studies which reveal that the database of the website design should be timely, informative, and user-friendly. Besides, he thought that the suitable linkage would make it easier to find the information very quickly. The data are consistent with the studies (Madu and Madu, 2002; Santos, 2003) thinking suitable linkages / choices help visitors easily find the information, which customers are interested in and too many choices, sometimes, lead to confusions.

Respondent C also indicated that when he wanted to buy something from the online shop, he did not like to wait if the speed of the network connection was slow. These data verify the theories (Dellaert and Kahn, 1999; Madu and Madu, 2002) which indicates that the network connection speed should be paid special attentions to in the website design. Ultimately, in his point of view, it is very important that the online shop works for 24 hours since one of the main advantages of the online shop is that it can open for 24 hours per day. Thus, from the online shop, he can buy anything at any time. However, we have not found the studies, which take it as a variable that the online shop should work for 24 hours.

Table 21 (See P. 66) summarizes how website design affects the perceived e-service quality in online shopping according to respondent C’s experiences.

6.3.2 Reliability
The reliability under the environment of the e-commerce usually refers to a functional quality dimension and simultaneously to the reliability of the information content on the website (Semeijn et al., 2005). Respondent C pointed out that if he discovered that the products he bought were different form the one which he really wanted, he would be unhappy. Thus, he will not visit the website, again. These data are consistent with the studies conducted by Doll and Torkzadeh (1998), Yang et al., (2004) and Semeijn et al., (2005), which show that it is crucial that the information provided on the website is accurate.

Then, he stressed that if the online shop could not fulfill his order correctly, he would not buy anything else from this website again. These data confirm the studies conducted by Parasuraman et al. (1988), Kim and Lee (2002), Collier and Bienstock (2003), van Riel et al. (2003), Jun et al. (2004) and Yang et al. (2004), which reveals that it is an important factor of the reliability to fulfill orders correctly.
### Table 21: Respondent C’ Opinions on How Website Design Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Website Design (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005)</th>
<th>Experiences of E-service Quality according to Respondent C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Criteria for the Dimensions</strong></td>
<td><strong>Important</strong></td>
</tr>
<tr>
<td>Navigation (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002)</td>
<td>Know where they are and where they are going</td>
</tr>
<tr>
<td>Well-performing search engine</td>
<td>No so important / Never use it in online shop</td>
</tr>
<tr>
<td>Fast and logical manoeuvrability</td>
<td>It was easy for him to move</td>
</tr>
<tr>
<td>Visual characteristics/appearances (Images, Backgrounds, Colors, Structures/layouts). (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Important</td>
</tr>
<tr>
<td>Aesthetic/e-scape (How information is presented through the use of colors, layouts, pictures, and font sizes as well as styles). (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005)</td>
<td>Attract him to visit this online shop</td>
</tr>
<tr>
<td>Content (D’Angelo and Little, 1998; Doll and Torkzadeh, 1998; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Important</td>
</tr>
<tr>
<td>Suitable content</td>
<td>Easy to find the information</td>
</tr>
<tr>
<td>Specific content</td>
<td>More things the website offers to him, the more choices he can choose</td>
</tr>
<tr>
<td>Design of database (Wigand, 1997)</td>
<td>Important</td>
</tr>
<tr>
<td>Timely</td>
<td>It is good that the information is updated very fast</td>
</tr>
<tr>
<td>Informative</td>
<td>It is easy for him to pick up what he likes</td>
</tr>
<tr>
<td>User-friendly</td>
<td>Help him find the information easily</td>
</tr>
<tr>
<td>Suitable linkage / Not too many choices</td>
<td>Important</td>
</tr>
<tr>
<td>Delays caused by network connections (Due to too slowly to download information) (Dellaert and Kahn, 1999; Madu and Madu, 2002)</td>
<td>Important/ Not like to wait</td>
</tr>
<tr>
<td>No theory Found</td>
<td>It was very important that online shop works for 24 hours on the website for the perceived e-service quality in online shopping</td>
</tr>
</tbody>
</table>
After that, he showed that it was significant that the online shop delivered the products or services promptly. He thought that at least the online shop should deliver the products following the promised time. Those data verify the studies conducted by Parasuraman et al. (1988), Kim and Lee (2002), which indicate that the reliability represents the ability of the website to deliver promptly or with the promised time (van Riel et al., 2003). Besides, he mentioned that it was important that the online shop kept his personal information secure or at least made his financial account secure. However, if different companies share his email address, it does not matter. Those data are related to the theory that the reliability also represents the ability of the online shop to keep customers’ personal information secure (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004).

Respondent C’s experiences on the topic of how reliability affects the perceived e-service quality in online shopping are presented in Table 22.

### Table 22: Respondent C’ Opinions on How Reliability Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Reliability (Zeithaml, et al., 2000; Barnes and Vidgen, 2001; Gefen 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Wang, 2003; Yang et al., 2003; Jun et al., 2004; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information provided on the website accurate (Doll and Torkzadeh, 1998; Yang et al., 2004; Semeijn et al., 2005)</td>
<td>Important</td>
</tr>
<tr>
<td>If information provided on the website inaccurate</td>
<td>Disappointment / Not visit to this website again</td>
</tr>
<tr>
<td>• Fulfill orders correctly (Parasuraman et al., 1988; Kim and lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun et al., 2004; Yang et al., 2004)</td>
<td>Important</td>
</tr>
<tr>
<td>If not Fulfill orders correctly</td>
<td>Never buy anything else from this website again</td>
</tr>
<tr>
<td>• Deliver promptly/ within the promised time (Parasuraman et al., 1988; Kim and lee, 2002; van Riel et al., 2003)</td>
<td>Important / At least should deliver the products with the time they promised/ Does not like the delay</td>
</tr>
<tr>
<td>• Keep personal information secure (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004)</td>
<td>Important/ Should keep his financial account secure/ It is ok that different companies shares his email address</td>
</tr>
</tbody>
</table>

### 6.3.3 Responsiveness

Responsiveness is defined as how often an online shop voluntarily provides the important services,
such as customer inquiries, information retrievals and navigation speeds to its customers, according to Parasuraman et al. (1988), Yang (2001), and Kim and Lee (2002). Respondent C stressed that it was significant for the perceived e-service quality in online shopping that the online shop provided the service about customer inquiries. The data enrich the studies showing it is important to provide the appropriate information to customers when a problem occurs so that the customers can know more of the products (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003).

Subsequently, Respondent C thought that it was more influential for the online shop than customers that the online shop retrieved customers’ suggestions. Later, he stated that if the navigation speed was slow, he would switch to another website. These data support the conclusions that the responsiveness describes how often an online store voluntarily provides services (e.g. information retrieval and navigation speed) that were important to its customers (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002). He further mentioned that it was significant for the perceived e-service quality in online shopping that the online shop arranged for online guarantees, since the online guarantees helped him to choose the products. These data support the idea that the “responsiveness” measures the ability of a company to provide an arrangement for online guarantees (Wang, 2003).

In respondent C’s opinion, it was crucial for the perceived service quality in online shopping that the online shop provided a quick response to his requests. If he asks some questions, he hopes the online shop answer him very quickly, because the answers may be important today but not in the next day. The data validate the researches arguing that a quick response to requests is likely to increase the perceived convenience and diminish the uncertainty, and is also an important way for companies to show that they are customer-oriented and act benevolently toward customers (Gummerus et al., 2004). Therefore, customers expect online stores to respond to their inquiries promptly (Liao and Cheung, 2002; Jay, 2004). Actually a fast response has been identified as an element of high-quality services (Voss, 2000).

On the basis of respondent C’s experiences, it is listed in Table 23 (See P. 69) that how responsiveness affects the perceived e-service quality in online shopping.

6.3.4 Trust
Kimery and McCard (2002) defined the trust as the willingness that customers accepted the behaviors of an online shop according to their positive expectations. Respondent C stressed when he bought products form an online shop, he usually did not know the reputation of the online shop. But he likes and trusts the online shop that has a good reputation. He also showed the offline company reputation is important. He is ready to trust the online shop if he knows its offline company is strong. If the online shop satisfies his requests each time, he will become a loyal customer of the online shop and will correspondingly trust it. The information supports the studies arguing that the pre-purchase knowledge / after-purchase knowledge including the store reputation (Egger, 2002; Madu and Madu, 2002) and customer loyalty (McCole, 2002) are important factors
affecting the trust.

**Table 23: Respondent C’ Opinions on How Responsiveness Affects the Perceived E-service Quality in Online Shopping**

| E-service Quality Dimension: Responsiveness (Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen, 2002; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Zeithaml et al., 2002; Surjadja et al., 2003; Wang, 2003; Yang et al., 2003; Parasuraman et al., 2004; Yang et al., 2004; Lee and Lin, 2005) | 
| --- | --- |
| ● Provide the appropriate service/information to customers when a problem occurs i.e. Customer inquires (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003) | Important  
Should provide some helps to the customers  
Help customers know more about the products |
| Information retrieval (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002) | More important for the online shop than the customers |
| ● The navigation speed (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002) | Important |
| ● If the navigation speed is slow | Change the website to another one |
| ● Arranging for online guarantees (Wang, 2003) | Help him to choose the products |
| ● A quick response to requests (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004) | Important  
Hope the online shop can answer him very quickly  
Importance of the answer varies for him depending on the time |

Then, he discussed that it was meaningful that the online shop had very comfortable graphics and colors. He further described that if the website had very comfortable graphics and colors, he would think this company put lots of money on this website and the company was creditable. All of those data are consistent with the studies, which indicate the interface properties are important factors of the trust (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002).

After that, he indicated it was crucial for the perceived service quality in online shopping that the online shop provided the information about policies/guarantees. If an online shop provides the information, he will think the online shop shows all the points to him and then believe in the website. As for the background information of the online shop, respondent C thought it was not so important because he had never minded it. Besides, he concluded that it was very influential that the online shop provided the necessary and good information, which will help him understand the products. These data verify the studies (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002) on the factor of the information content, which reveal that the information about the online shop’s policies/guarantees and the background information are also important to the customers.

How trust affects the perceived e-service quality in online shopping is explained in Table 24.
Table 24: Respondent C’s Opinions on How Trust Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Trust (Zeithaml et al., 2000; Loiacono et al., 2002; Madu and Madu, 2002; Parasuraman, 2002; Voss, 2003; Lee and Lin, 2005)</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Pre-purchase knowledge /After-purchase knowledge (Egger, 2002; Madu and Madu, 2002; McCole, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Good store reputation (online store and offline store)</td>
<td>Like and trust this online shop</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Trust this online shop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interface properties (Design of the user interfaces, i.e. the graphics and color) (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002)</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the website had every comfortable graphics and colors</td>
<td>Thought this company put lots of money on this website / This is a strong company / Help him to make more trust</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information content (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002)</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provide by the store about their policies/ guarantees</td>
<td>The online shop shows all the points to him Believe this website</td>
</tr>
<tr>
<td>Background information about the company</td>
<td>Not so importantNever mind it</td>
</tr>
<tr>
<td>Other Information provided to the customers</td>
<td>Necessary and good information is easy for him to understand the products</td>
</tr>
</tbody>
</table>

6.3.5 Personalization

The personalization addresses the individual attentions, the personal thanks noted by customers from the online stores, and the availabilities of a message area for customers making comments (Yang, 2001). Respondent C thought it was not so important for him since in his opinion it is more useful for company.

Subsequently, he stressed that it was crucial that the online shop gave the different customers the different services. He further mentioned depending on the degree that the online shop fulfills his need, he would decide if he would leave the online shop or not. After that, he mentioned that it was influential that the online shop satisfied his individual need. If the online shop satisfied his need, he would be happy. The data are related to the study (Huang and Lin, 2005), which regards it as the heart of the personalization to satisfy the individual customer’s unique needs.

Besides, respondent C also pointed out the price was an important factor affecting the e-service quality in online shopping. This data is related to Zeithaml et al’s (2000) and Parasuraman’s (2002) studies which argue that the price knowledge is an important dimension of e-service quality.
Based on respondent C’s experiences, it is schematically shown in Table 25 that how personalization affects the perceived e-service quality in online shopping.

**Table 25: Respondent C’ Opinions on How Personalization Affects the Perceived E-service Quality in Online Shopping**

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Personalization (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Individual attentions (Yang, 2001)</td>
<td>More useful and important for the company than him</td>
</tr>
<tr>
<td>- Personal acknowledgements which customers note from online stores (Yang, 2001)</td>
<td>More useful and important for the company than him</td>
</tr>
<tr>
<td>- Availabilities of message areas for customers to make comments and suggestion (Yang, 2001)</td>
<td>More useful and important for the company than him</td>
</tr>
<tr>
<td>- Satisfy the individual customers’ unique needs (Huang and Lin, et al., 2005)</td>
<td>Important / Should at least fulfill his need / He would be happy</td>
</tr>
<tr>
<td>If not satisfy his needs</td>
<td>Depending on the degree that the online shop fulfills his need, then decide if he would leave this online shop or not</td>
</tr>
<tr>
<td>Price (Zeithaml et al., 2000; Parasuraman, 2002)</td>
<td></td>
</tr>
<tr>
<td>Price knowledge is a important dimension of e-service quality</td>
<td>Important / One of the reason for him to buy the products from the online shop is the cheaper the price there than the offline shop</td>
</tr>
</tbody>
</table>

**6.4 Within-case Analysis - Case Four: Respondent D**

Below, we will address how the five dimensions affect the perceived e-service quality following respondent D’s experiences using the within-case analysis. As indicated in Chapter Five, the fourth case study is conducted with respondent D who is working as an instructor / Ph.D. Candidate at Luleå University of Technology, Sweden. He is 43 years old and has been born in Sweden.

**6.4.1 Website Design**

The website design describes the appeal of the user interface design presented to customers (Kim and Lee, 2002). Firstly, respondent D stressed the navigation was important for him to follow the trace of the website to find the information. Then he indicated that it was important for the online shop to offer the fast and logical maneuverability. These data enrich the studies on the factor of the navigation in the web design (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002).
After that, he indicated that he had bad experiences with search engine in online shop. Thus he thought the search engine was not so important.

Additionally, respondent D showed that the structures/layouts were important for the website appearances. The data confirm the studies that address the structure is an important dimension of the e-service quality (Madu and Madu, 2002). He also indicated that the images, backgrounds, colors, and sounds were not so important, since he had never cared of them. In respondent D’s opinion, it is crucial that the online shop provides the suitable or special contents, since the more contents the website offers to him, the more choices he can choose. The data verify the studies conducted by D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), Kaynama and Black (2002), Madu and Madu (2002) and Santos (2003), which regard the content as an important factor of the website design.

During the interview, respondent D thought that the timely, informative and user-friendly database was not so important since he had never minded it. However, he thought that it was influential that the website provided the suitable linkage, because, with this, he could know how to buy the products or services. The data are consistent with the theory proposed by Madu and Madu (2002) and Santos (2003) that suitable linkage/choices can make visitors clearly find the information on the website and too many choices may lead to confusions. Furthermore, he described that he had no patience to wait for a long time. If the connection speed or navigation speed is slow, he will leave the online shop. Those data support the arguments that the website design should pay special attentions to the network connection speed (Dellaert and Kahn, 1999; Madu and Madu, 2002).

Finally, respondent D added the online shop, which worked for 24 hours, provided him with great conveniences to surf on the online shop. However, till now, as far as we know, there is no study regarding it as a variable that the online shop should work for 24 hours.

Table 26 (See P. 73) summarizes how website design affects the perceived e-service quality in online shopping according to respondent D’s experiences.

### 6.4.2 Reliability

Under e-commerce environments, the reliability is often defined as a functional quality dimension and moreover includes the reliability of the information on the website (Semeijn et al., 2005). Respondent D pointed out that it was important that the information provided on the website was accurate. The data are consistent with the studies conducted by Doll and Torkzadeh (1998), Yang et al. (2004) and Semeijn et al. (2005), which stress that the information on the website should be accurate.
Table 26: Respondent D’ Opinions on How Website Design Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Website Design (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005)</th>
<th>Measurement Criteria for the Dimensions</th>
<th>Experiences of E-service Quality according to Respondent D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation (Rice, 1997; D’Angelo and Little 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002)</td>
<td>Know where they are and where they are going</td>
<td>Important</td>
</tr>
<tr>
<td>Well-performing search engine</td>
<td></td>
<td>Should follow the trace of the website to find the information</td>
</tr>
<tr>
<td>Fast and logical manoeuvrability</td>
<td></td>
<td>Not so important / Had bad experiences</td>
</tr>
<tr>
<td>Visual characteristics/ appearances (Included Images, Backgrounds, Colors, Structures/layouts) (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Aesthetic/e-scape (How information is presented through the use of colors, layouts, pictures, and font sizes as well as styles). (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005)</td>
<td>Not so important but Structure Never mind it</td>
</tr>
<tr>
<td>Suitable content</td>
<td>Linage/choices (Madu and Madu, 2002; Santos, 2003)</td>
<td>Important</td>
</tr>
<tr>
<td>Specific content</td>
<td>Design of database (Timely, Informative, User-friendly). (Wigand, 1997)</td>
<td>Not so important Not care of it</td>
</tr>
<tr>
<td>Fast network connections (Dellaert and Kahn, 1999; Madu and Madu, 2002)</td>
<td>The online shop work for 24 hours (No theory Found)</td>
<td>Important</td>
</tr>
<tr>
<td>If the connection speed or navigation speed is slow</td>
<td></td>
<td>No patience to wait for long time Leave this online shop</td>
</tr>
<tr>
<td>The online shop work for 24 hours</td>
<td></td>
<td>The online shop, which works for 24 hours, provides him with great conveniences to surf on the online shop</td>
</tr>
</tbody>
</table>
Then, respondent D expressed that it was very important for the online shop to fulfill his orders correctly. If an online shop fulfills his orders incorrectly, he will not believe it. All of those data verify the previous studies (Parasuraman et al., 1988; Kim and Lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun, et al., 2004; Yang et al., 2004), which conclude that it is an important factor of the reliability to fulfill orders correctly. After that, He thought it was crucial that the online shop delivered the products or services promptly. The online shop should deliver the products following the time, which it promised, not fast or slow. The data confirm the previous researches, which reveal that the reliability represents the ability of the website to deliver promptly (Parasuraman et al., 1988; Kim and Lee, 2002) or within the promised time (van Riel et al., 2003).

In his point of view, it is very important to keep the customer’s personal information secure but it also depends on what kind of personal information. The data is related to the theories (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004), which think that the reliability represents the ability of the website to keep customers’ personal information secure.

Respondent D’s experiences on the topic of how reliability affects the perceived e-service quality in online shopping are presented in Table 27.

Table 27: Respondent D’ Opinions on How Reliability Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Reliability</th>
<th>Important</th>
<th>Not believe this online shop again</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided on the website accurate</td>
<td>Important</td>
<td>Switch to another website</td>
</tr>
<tr>
<td>Fulfill orders correctly</td>
<td>Important</td>
<td>Following the promised time</td>
</tr>
<tr>
<td>Deliver promptly/ within the promised time</td>
<td>Important</td>
<td>Depend on what kind of personal information</td>
</tr>
<tr>
<td>Keep personal information secure</td>
<td>Important</td>
<td></td>
</tr>
</tbody>
</table>

(Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Wang, 2003; Yang et al., 2003; Jun et al. 2004; Lee and Lin, 2005)
6.4.3 Responsiveness

It belongs to the responsiveness that how often an online store voluntarily provides services (e.g. customer inquires, information retrieval and navigation speed), which are important to its customers (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002). Respondent D firstly predicted in future more and more people would use the online shopping. Thus, the online shop should provide the services about customer inquiries. The information is related to the studies (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003) indicating that it is crucial that the online shop provides the appropriate service/information to customers when a problem occurs.

After that, he mentioned that it was not so influential that the online shop retrieved his suggestion since he had never minded it. Moreover, he stressed that he had no patience to wait for a long time. If the connection speed or navigation speed is slow, he will leave the online shop. The data confirm the studies conducted by Parasuraman et al. (1988), Yang (2001), and Kim and Lee (2002), which reveal that the responsiveness describes how often an online store voluntarily provides services. Besides, he thought it was important for the online shop to arrange for online guarantees, which would increase his trust on the online shop. The data verify the research (Wang, 2003) arguing that the “responsiveness” measures the ability of a company to provide the appropriate information to customers when a problem occurs, a mechanism for handling returns, and an arrangement for online guarantees.

Eventually, respondent D pointed out if he asked an online shop questions, it should reply him very quickly. The data are consistent with the conclusion that a quick response to requests is likely to increase the perceived convenience and diminish the uncertainty, and is also an important way for companies to show that the online shops are customer-oriented and act benevolently toward customers (Gummerus et al., 2004). Furthermore, customers expect online stores to respond to their inquiries promptly (Li and Cheung, 2002; Jay, 2004) and customers have identified a fast response as an element of high-quality services (Voss, 2000).

On the basis of respondent D’s experiences, it is listed in Table 28 (See P. 76) that how responsiveness affects the perceived e-service quality in online shopping.

6.4.4 Trust

According to Kimery and McCard (2002), the trust describes the customer’s willingness to accept voluntarily an online transaction based on their positive expectations regarding future online store behaviors. In respondent D’s point of view, it is important that the online shop has a good store reputation. If he is a loyal customer of an online shop, he will trust the company. These data are related to the factor of the pre-purchase knowledge / after-purchase knowledge including the store reputation (Egger, 2002; Madu and Madu 2002) and customer loyalty (McCole, 2002), which is identified as an important factor affecting the trust. From his point of view, very comfortable
Table 28: Respondent D’s Opinions on How Responsiveness Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Responsiveness (Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen, 2002; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Zeithaml et al., 2002; Surjadjaja et al., 2003; Wang, 2003; Yang et al., 2003; Parasuraman et al., 2004; Yang et al., 2004; Lee and Lin, 2005)</th>
<th>Should provide the service about customer inquiries on the website</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide the appropriate service/information to customers when a problem occurs i.e. customer inquiries. (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003)</td>
<td>Should provide the service about customer inquiries on the website</td>
</tr>
<tr>
<td>• Information retrieval (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Not so important</td>
</tr>
<tr>
<td>• The navigation speed (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>If the navigation speed is slow</td>
<td>Important</td>
</tr>
<tr>
<td>• Arranging for online guarantees (Wang, 2003)</td>
<td>Important</td>
</tr>
<tr>
<td>• A quick response to requests (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004)</td>
<td>Should reply him very quickly</td>
</tr>
</tbody>
</table>

After that, he emphasized that it would make him believe in the online shop if the online shop provided the information about policies / guarantees. He further thought that the background information of the online shop was important, since he could understand more about the online shop. At last, he commented it was crucial that the online shop provided the necessary and good information. All of these data support the previous studies (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002), which argue that it is important for the online shop to provide the information of their policies/guarantee and background information to the customers.

How trust affects the perceived e-service quality in online shopping is explained in Table 29 (See P. 77).

6.4.5 Personalization

The individual attentions, the personal thanks noted by customers from the online stores, and the availabilities of a message area for comments belong to the scope of the personalization (Yang, 2001). Respondent D stressed that it was not so important for him since he has never minded it. If he wants to buy a product which the online shop does not have, he will switch to another website instead of giving the suggestion to the online shop.
Table 29: Respondent D’ Opinions on How Trust Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Trust (Zeithaml et al., 2000; Loiacono et al., 2002; Madu and Madu, 2002; Parasuraman, 2002; Voss, 2003; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-purchase knowledge /After-purchase knowledge (Include store reputation Customer loyalty). (Egger, 2002; Madu and Madu, 2002; McCole, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Interface properties (Design of the user interfaces, i.e. the graphics and color) (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002)</td>
<td>Not so important</td>
</tr>
<tr>
<td>Information content (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002)</td>
<td>Important</td>
</tr>
<tr>
<td>Information provide by the store about their policies/ guarantees</td>
<td>Believe this online shop</td>
</tr>
<tr>
<td>Background information about the company</td>
<td>Understand more about this online shop</td>
</tr>
<tr>
<td>Other information provided to the customers</td>
<td>Important / Necessary and good information</td>
</tr>
</tbody>
</table>

Then, respondent D described the online shop should give the different customers the different needs. After that, he showed it was influential that the online shop satisfied his individual need as long as he needed it. If the online shop cannot satisfy his need, he will never go to this online shop again. The data confirm the study (Huang and Lin, 2005), which argues that the heart of personalization is to satisfy the individual customers’ unique needs.

Finally, in his opinion, it is crucial that the information, which he gives to the company, is not misused. He does not like that his information goes everywhere. In this point, respondent D’s opinion verifies Zeithaml et al’s (2002) study indicating that it is an important factor of the privacy not to misuse the personal information, which should also not be shared by the different companies or even the different department in the same company without the customer permission.

Based on respondent D’s experiences, it is schematically shown in Table 30 (See P. 78) that how personalization affects the perceived e-service quality in online shopping.

6.5 Cross-case Analysis

In this section, the data will be re-examined through a cross-case analysis, where the four cases are compared with each other. The similarities and differences will be identified and discussed by comparing the data from the four case studies.
Table 30: Respondent D’ Opinions on How Personalization Affects the Perceived E-service Quality in Online Shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Personalization (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Individual attentions (Yang, 2001)</td>
<td>Not so important</td>
</tr>
<tr>
<td></td>
<td>Never mind it</td>
</tr>
<tr>
<td>• Personal acknowledgements which customers note from online stores (Yang, 2001)</td>
<td>Not so important</td>
</tr>
<tr>
<td></td>
<td>Never mind it</td>
</tr>
<tr>
<td>• Availabilities of message areas for customers to make comments and suggestion (Yang, 2001)</td>
<td>Not so important</td>
</tr>
<tr>
<td></td>
<td>Never mind it</td>
</tr>
<tr>
<td></td>
<td>Does not like give the suggestion to online shop</td>
</tr>
<tr>
<td>• Satisfy the individual customers’ unique needs (Huang and Lin, 2005)</td>
<td>Important</td>
</tr>
<tr>
<td></td>
<td>Should give all the customers different needs</td>
</tr>
<tr>
<td>If the online shop cannot satisfy his need</td>
<td>Never go to this online shop again</td>
</tr>
<tr>
<td>• Personal information can not be shared (Zeithaml et al., 2002)</td>
<td>Not like that his information goes everywhere</td>
</tr>
</tbody>
</table>

6.5.1 Website Design

Regarding the first research question, i.e. how does website design affect the perceived e-service quality in online shopping, we found there were some similarities and differences between the answers from the four respondents. All of respondents thought the website design was an important dimension of the e-service quality in online shopping. The data are consistent with the understanding that the website design is an important factor in determining the customers-perceived e-service quality and has significant and positive impacts on the customers’ perceived e-service quality (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005).

The factor of the navigation in website design can influence the perceived e-service quality in online shopping. For example, all of respondents thought it was influential for the navigation to know where they were and where they were going, find the information easily on the web and offer the fast and logical maneuverability, which would then affect the perceived e-service quality in online shopping. Besides, respondent A also mentioned the well-performing search engine was also crucial for the perceived e-service quality in online shopping. The obtained materials from all of respondents support the theory that the navigation is an important factor of the website design, i.e. (1) It is important to know where you are and where you are going; and (2) Websites with the adequate navigation quality consistently enable users to find what they want easily, via a dependable and well-performing search engine offering the fast and logical maneuverability (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and
Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002). However, respondents B, C and D thought it was not so important that the website provided well-performing search engine for the perceived service quality in online shopping since respondents B and D had bad experiences with the search engine and respondent C had never used the search engine in online shop.

Then all of respondents have more or less the same opinions regarding the visual characteristics/appearances. Respondents A, B and C mentioned the images, backgrounds, colors, structures/layouts were important for the perceived e-service quality in online shopping. All of these data are related to the factor of the visual characteristics / appearances (i.e. images, backgrounds, colors, and structures/layouts) (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003). However, respondent D indicated the structures/layouts were significant but not as for the other factors of the visual appearances, since he never minds the others. The data support the studies which address the structure is an important dimension of the perceived e-service quality (Madu and Madu, 2002).

After that, respondent A, B and C discussed if the colors, layouts, pictures and font sizes as well as styles were good, it maybe attracted them to visit the website. These data verify the studies (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005) arguing the aesthetic / e-scape (It reflects how information is presented through the use of colors, layouts, pictures and font sizes as well as styles) and the visual characteristics / appearances are important for the website design. But respondent D thought the aesthetic was not so important for the perceived e-service quality in online shopping, since he just focused on the product which he would buy instead of the appearance of the website.

Regarding the factor of contents in website design, all respondents stressed that the suitable contents and special contents were important for the perceived e-service quality. The data are consistent with the studies conducted by D’Angelo and Little (1998), Doll and Torkzadeh (1998), Aladwani and Palvia (2002), Kaynama and Black (2002), Madu and Madu (2002) and Santos (2003), which stress the content is an important factor of the website design. Besides, when they talked about the design of databases, respondents A, B and C mentioned that the timely, informative, and user-friendly database was crucial for the perceived e-service quality in online shopping. These data verify Wigand’s (1997) theory that the database on the website should be timely, informative, and user-friendly. However, respondent D thought it was not so important since he had never minded it.

Additionally, all respondents thought that suitable linkages/choices were significant for the perceived e-service quality and that the network connection speed was crucial for the perceived e-service quality. According to Madu and Madu (2002) and Santos (2003), suitable linkages / choices can make visitors easily find the information in the website and too many choices may not necessarily mean a good thing and could lead to confusions. If the connection speed is very slowly,
they will switch to another website. These data supports the ideas that the network connection speed should be paid special attentions to in the website design (Dellaert and Kahn, 1999; Madu and Madu, 2002). Eventually, all of respondents concluded that it was important that the online shop works for 24 hours for the perceived e-service quality in online shopping. However, till now, we have not found the theory, which regards it as a variable that the online shop should work for 24 hours.

The similarities and differences between the four cases are summarized in Table 31 according to the four respondents’ experiences with the topic of how website design affects the perceived e-service quality in online shopping.

Table 31: Similarities and differences between the data obtained from the four case studies regarding how website design affects the perceived e-service quality in online shopping:

<table>
<thead>
<tr>
<th>E-service Duality Dimension: Website Design (Loiacono et al., 2002; Wolfinbarger and Gilly, 2002; Lee and Lin, 2005)</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
<th>Respondent D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Navigation</strong> (Know where they are and where they are going/Understand the information/Find what they want/Well-performing search engine/Fast and logical manoeuvrability) (Rice, 1997; D’Angelo and Little, 1998; Zeithaml et al., 2000; Kaynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Than and Grandon, 2002)</td>
<td>Important</td>
<td>Important except the search engine</td>
<td>Important except the search engine</td>
<td>Important except the search engine</td>
</tr>
<tr>
<td><strong>Visual characteristics/ appearance</strong> (Day, 1997; D’Angelo and Little, 1998; Bitner et al., 2000; Cox and Dale, 2001; Goldsmith, 2001; Aladwani and Palvia, 2002; Kaynama and Black, 2002; Loiacono et al., 2002; Madu and Madu, 2002; Santos, 2003)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Not so important except Structure/layout Never mind others</td>
</tr>
<tr>
<td><strong>Aesthetic/e-scape</strong> (It reflects how information is presented through the use of colors, layouts, pictures and font size and style. (Day, 1997; Zeithaml et al., 2000; Madu and Madu, 2002; Parasuraman, 2002; Yang et al., 2003; Semeijn et al., 2005)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Not so important Not care of it Just focus on the products/services</td>
</tr>
</tbody>
</table>
6.5.2 Reliability

Regarding the issue of reliability, all of respondents thought it was an important dimension of the e-service quality in online shopping. According to Zeithaml et al. (2000), Barnes and Vidgen (2001), Gefen (2002), Madu and Madu (2002), Parasuraman (2002), Wolfinbarger and Gilly (2002), Yang and Jun (2002), Zeithaml et al. (2002), Santos (2003), Wang (2003), Yang et al. (2003), Jun et al. (2004) and Lee and Lin (2005), the reliability is the important determinant of the perceived e-service quality.

At the beginning, all of respondents thought the online shop should provide the accurate information. The data are consistent with the studies conducted by Doll and Torkzadeh (1998), Yang et al. (2004) and Semeijn et al. (2005), which indicate that it is crucial that the information provided on the website is accurate. All respondents further stressed it is important to fulfill their orders correctly. The data verify the previous studies (Parasuraman et al., 1988; Kim and Lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun et al., 2004; Yang et al., 2004), which reveal that it was an important factor of the reliability to fulfill orders correctly. Then, respondent A mentioned that he expected to receive his product as soon as possible or at least follow the schedule. Respondent B mentioned the deliver time should be as short as possible but it also depends on the products. If the products are very big and expensive, she can wait for a long time. Respondents C and D mentioned the deliver time should follow the schedule, which they published online. The data confirm the previous researches, which reveal that the reliability represents the ability of the website to deliver promptly (Parasuraman et al., 1988; Kim and Lee, 2002) or within the promised time (van Riel et al., 2003).

After that, all respondents stressed it was important to keep the personal information secure for the
perceived e-service quality in online shopping. The data is related to the theories (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004), which think that the reliability represents the ability of the website to keep customers’ personal information secure. However, respondents C and D thought it depended on the kind of information. If their e-mail address is shared between different online shops, it does not matter. If the finance information is shared, they will leave the website. Besides, respondent B added, from her point of view, the brand was also important for the reliability. However, it is a pity that there is no theory, which regards the brand as a variable of the reliability. Moreover, respondent A also added he also wanted the online shop to trace where the product was delivered and timely inform him where the product was during the transaction process. However, till now, we have not found the theory to support this factor.

Table 32 lists the similarities and differences between the data obtained from the four case studies on the topic of how reliability affects the perceived e-service quality in online shopping.

Table 32: Similarities and differences between the data obtained from the four case studies regarding how reliability affects perceived e-service quality in online shopping

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information provided on the website accurate (Doll and Torkzadeh, 1998; Yang et al., 2004; Semeijn et al., 2005)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>• Fulfill orders correctly (Parasuraman et al., 1988; Kim and Lee, 2002; Collier and Bienstock, 2003; van Riel et al., 2003; Jun et al., 2004; Yang et al., 2004)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>• Deliver promptly/ Within the promised time (Parasuraman et al., 1988; Kim and Lee, 2002; van Riel et al., 2003)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>• Keep personal information secure (Parasuraman et al., 1988; Giannakoudi, 1999; Zeithaml et al., 2000; Kim and Lee, 2002; Madu and Madu, 2002; Parasuraman, 2002; Wolfinbarger and Gilly, 2002; Yang and Jun, 2002; Zeithaml et al., 2002; Santos, 2003; Yang et al., 2003; Parasuraman et al., 2004)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>• Brand (No theory Found)</td>
<td>Important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.5.3 Responsiveness
All of respondents thought the responsiveness was the important dimension of the e-service quality in online shopping. The data support the arguments (Zeithaml, et al., 2000; Barnes and Vidgen, 2001; Gefen, 2002; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Zeithaml, et al. 2002; Surjadja et al., 2003; Wang, 2003; Yang et al., 2003; Parasuraman et al., 2004; Yang et al., 2004; Lee and Lin, 2005) that the responsiveness is an important dimension of the consumers' perceived e-service quality.

Then, all respondents stressed it was crucial for the online shop to provide the appropriate information to customers when a problem occurs i.e. the customer inquires, the navigation speed, and the arrangement for online guarantees. After that, respondent A emphasized that the information retrieval was also influential for the perceived e-service quality in online shopping. All of these data verify the studies (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002), which indicate the services, e.g. customer inquires, information retrievals and navigation speeds are important for the perceived e-service quality, and support Wang’s (2003) study, which describes that the responsiveness can be measured by providing the appropriate information to customers when a problem occurs, and arranging for online guarantees.

Besides, all of respondents pointed out a quick response to requests was crucial, which are consistent with the studies (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004) which arguing that a quick response to requests is also one of the most important factors of the responsiveness. Moreover, respondent B thought the information retrieval was not so important, since she had never minded it. Respondent C further described the information retrieval is more important for the online shop than customers. Respondent D said he had never minded it and thus, in his opinion, it was not so important to retrieve information from customers for the perceived e-service quality in online shopping.

The similarities and differences between the four respondents’ experiences with the topic of how responsiveness affects the perceived e-service quality in online shopping are schematically presented in Table 33 (See P. 84).

6.5.4 Trust
Regarding the dimension of the trust, all of respondents thought the trust was an important dimension of the e-service quality in online shopping. The data support the studies conducted by Zeithaml et al. (2000), Loiacono et al. (2002), Madu and Madu (2002), Parasuraman (2002), Voss (2003), and Lee and Lin (2005), which stressed the trust is an important dimension of the consumers’ perceived e-service quality.
Table 33: Similarities and differences between the data obtained from the four case studies regarding how responsiveness affects perceived e-service quality in online shopping

<table>
<thead>
<tr>
<th>E-service Duality Dimension: Responsiveness (Zeithaml et al., 2000; Barnes and Vidgen, 2001; Gefen, 2002; Keynama and Black, 2002; Madu and Madu, 2002; Parasuraman, 2002; Zeithaml et al., 2002; Surjadija et al., 2003; Wang, 2003; Yang et al., 2003; Parasuraman, et al., 2004; Yang et al., 2004; Lee and Lin, 2005)</th>
<th>Measurement Criteria</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
<th>Respondent D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the appropriate service/information to customers when a problem occurs i.e. customer inquires (Paraguayan et al., 1988; Yang, 2001; Kim and Lee, 2002; Wang, 2003)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>Information retrieval (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important</td>
<td>Not so important</td>
<td>Not so important although important for online shop</td>
<td>Not so important Never mind it</td>
<td></td>
</tr>
<tr>
<td>The navigation speed (Parasuraman et al., 1988; Yang, 2001; Kim and Lee, 2002)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>Arranging for online guarantees (Wang, 2003)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>A quick response to requests (Voss, 2000; Liao and Cheung, 2002; Gummerus et al., 2004; Jay, 2004)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
</tbody>
</table>

Firstly, all respondents discussed the pre/after-purchase knowledge, i.e. the store reputation, and the customer loyalty, was significant for the perceived e-service quality in online shopping. These data are related to the factor of the pre-purchase knowledge / after-purchase knowledge including the store reputation (Egger, 2002; Madu and Madu, 2002) and customer loyalty (McCole, 2002), which is an important factor affecting the trust. Secondly, respondents B and C stressed that the interface properties were vital for the perceived e-service quality. The data are consistent with the studies, which indicate the interface properties, i.e. the graphics and colors, are influential factors of the trust (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002). As for the factor of the interface properties in the trust, respondents A and D thought it was not so meaningful for the perceived e-service quality in online shopping, but respondent A thought this issue could affect the website design instead of the trust. Respondent D thought he had never minded the interface properties when using the online shop.

After that, when they talked about the information content, which referred to the information provided by the store about their policies/guarantees, the background information about the company and the information provided to the customer, respondents A and D mentioned that all
those issues of information contents were influential for the perceived e-service quality in online shopping. Respondents B and C also thought the information contents were important for the perceived e-service quality but the background information of the company was not so meaningful in their opinions, since they had never read this kind of information. These data support the theories (Urban et al., 2000; Egger, 2002; Madu and Madu, 2002) regarding the information contents provided by the store about their policies/ guarantees, the background information about the company, and the information provided to the customers as important factors of the trust.

The similarities and differences between the data observed from the four case studies regarding the topic of how trust affects the perceived e-service quality in online shopping are shown in Table 34.

**Table 34: Similarities and differences between the data obtained from the four case studies regarding how trust affects perceived e-service quality in online shopping**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-purchase knowledge /After-purchase knowledge (Include store reputation Customer loyalty) (Egger, 2002; Madu and Madu, 2002; McCole, 2002)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td></td>
</tr>
<tr>
<td>Interface properties (Design of the user interfaces, i.e. the graphics and color) (Kim and Moon, 1998; Roy et al., 2001; Egger, 2002)</td>
<td>Not so important</td>
<td>Important</td>
<td>Important</td>
<td>Not so important</td>
<td></td>
</tr>
<tr>
<td>Information content (Information provide by the store about their policies/ guarantees; Background information about the company; Information provided to the customers)(Urban et al., 2000; Egger, 2002; Madu and Madu, 2002)</td>
<td>Important</td>
<td>Important expect background information about the company</td>
<td>Important expect background information about the company</td>
<td>Important</td>
<td></td>
</tr>
</tbody>
</table>

### 6.5.5 Personalization

As for dimension of personalization, all respondents thought personalization was an important dimension of the e-service quality in online shopping. This data is related to the theory which regarding the personalization as an important dimension of the customers’ perceived e-service quality (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005).
Respondent A stressed that it was influential that online shop provided the individual attention, the personal acknowledgements which customers noted from online stores, and the availabilities of message areas for customers to make comments and suggestion. This information supports Huang and Lin’s (2005) theory that the personalization gives each customer a unique experience and Yang’s (2001) study arguing personalization includes the information mentioned by respondent A. Respondent B concluded the behaviors were not so meaningful for the perceived e-service quality because she had never cared of it. Respondent C thought the behaviors were more significant for online shops than customers. Respondent D described that they were not so important for the perceived service quality in online shopping, since he did not mind it.

Finally, all respondents mentioned it was crucial for the customer perceived e-service quality in online shopping to satisfy the individual customer’s unique needs and not to misuse customer’s personal information. The data confirm the study (Huang and Lin, 2005), which argues that the heart of the personalization is to satisfy the individual customer’s unique needs.

Table 35 lists the similarities and differences between the four cases on the basis of the four respondents’ experiences with the topic of how personalization affects the perceived e-service quality in online shopping.

Table 35: Similarities and differences between the data obtained from the four case studies regarding how Personalization affects perceived e-service quality in online shopping

<table>
<thead>
<tr>
<th>E-service Quality Dimension: Personalization (Zeithaml et al., 2000; Keynama and Black, 2002; Parasuraman, 2002; Yang and Jun, 2002; Yang et al., 2003; Lee and Lin, 2005)</th>
<th>Respondent A</th>
<th>Respondent B</th>
<th>Respondent C</th>
<th>Respondent D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual attentions (Yang, 2001)</td>
<td>Important</td>
<td>Not so important</td>
<td>Not so important</td>
<td>Not so important</td>
</tr>
<tr>
<td>Personal acknowledgements which customers note from online stores (Yang, 2001)</td>
<td>Important</td>
<td>Not so important</td>
<td>Never mind it</td>
<td>Never mind it</td>
</tr>
<tr>
<td>Availabilities of message areas for customers to make comments and suggestion (Yang, 2001)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
</tr>
<tr>
<td>Satisfy the individual customers’ unique needs (Huang and Lin, 2005)</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
<td>Important</td>
</tr>
</tbody>
</table>
Chapter 7 Findings and conclusions

In this chapter, the five research questions proposed in Chapter Three will be answered and general conclusions will be drawn on the basis of the within-case analyses and cross-case analyses conducted in Chapter Six. In the end, the implications for the management, theory and future research will be addressed.

7.1 Conclusions

The purpose of this thesis was to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping. In order to fulfill the purpose, five research questions was proposed in Chapter Three. After this study, the five research questions are answered as the following:

7.1.1 RQ1: How does website design affect the perceived e-service quality in online shopping?

Website design is an important dimension of the e-service quality in online shopping. There are lots of important factors of the website design that can affect the perceived e-service quality in online shopping: e.g. the suitable/special content, suitable linkage/choice, network connection, navigation (to know where you are and where you are going, easily find and understand the information, and offer fast and logical maneuverability), visual characteristics (structure layout) and opening for 24 hours.

Moreover, this study also reveals that from the perspectives of some customers, there are still some other factors of the website design that can affect the perceived e-service quality in online shopping. They are the well-performing search engine; friendly links, images, backgrounds and colors on the website; e-scapes of the website; and timely, informative as well as user-friendly databases.

7.1.2 RQ2: How does reliability affect the perceived e-service quality in online shopping?

This study indicates that reliability is an influential dimension of the e-service quality in online shopping too. Reliability can affect the perceived e-service quality in online shopping through providing the accurate information, fulfilling the orders correctly, delivering the products following the schedule, and keeping the personal information secure.

In addition, in the opinions of some customers, the promise and brand are also important factors of the reliability. Here, the brand is identified as a possible new determinant of the reliability that can affect the perceived e-service quality in online shopping. Another important thing is that when the
online shop delivers the products/services to their customers, it should also trace the transporting process and timely inform the customers.

7.1.3 RQ3: How does responsiveness affect the perceived e-service quality in online shopping?
Responsiveness is a meaningful dimension affecting the perceived e-service quality in online shopping. After this study, it is found that the responsiveness influences the perceived e-service quality in online shopping through several factors. One of the important factors is to provide the appropriate service / information to customers when a problem occurs. Besides, the navigation speed, the arrangement for online guarantees and the quick response to requests are also significant factors of the responsiveness that can also affect the perceived e-service quality in online shopping.

Besides, from some customers’ point of view, the information retrieval is also emerging as a possible determinant of the responsiveness in some cases to affect the e-service quality in online shopping.

7.1.4 RQ4: How does trust affect the perceived e-service quality in online shopping?
The study implies that trust is also a vital dimension of the perceived e-service quality in online shopping. The per/after purchase knowledge and information contents (i.e. the information provided by the store about their policies/guarantees and the other information provided to customers on the website) are important factors of the trust affecting the perceived e-service quality in online shopping.

Moreover, according to some customers’ experiences, there are some other factors of the trust affecting the perceived e-service quality in online shopping, which are the interface properties (i.e. graphics, colors, etc), the background information of the online shop, the offline company reputation and different kinds of advertisements.

7.1.5 RQ5: How does personalization affect the perceived e-service quality in online shopping?
The finding in this study indicates that personalization is one of the crucial dimensions of the e-service quality in online shopping. In the personalization, satisfying the individual customer’s unique needs is the important factors affecting the perceived e-service quality in online shopping.

Besides, in some customers’ opinion, it may also be a possible determinant of the personalization affecting the perceived e-service quality in online shopping to provide individual attention, personal acknowledgements which customers note from online stores, and availabilities of message areas for customers to make comments and suggestion.
7.1.6 How do these five dimensions affect the perceived e-service quality in online shopping?
It can be seen from this study that the dimensions, i.e. website design, reliability, responsiveness, trust and personalization, influence the customer perceived e-service quality through their respective factors. Correspondingly, by answering the research questions, a better understanding of how these dimensions affect the perceived e-service quality has been gained.

7.2 Implications

In the following, the implications for managements, theories and future researches will be addressed.

7.2.1 Implications for Managements
With the rapid global development of the electronic commerce, more and more online shops are beginning to realize that the key determinant of successes is to deliver the high quality of e-services to their customers (Yang, 2001; Zeithaml, 2002; Wang, 2003). The purpose of this thesis was to gain a better understanding of the dimensions that affect the customer perceived e-service quality in online shopping. Thus, if the managements want to maintain a high level of e-service quality in online shopping, the online shop must pay attention to all these dimensions (i.e. website design, reliability, responsiveness, trust, and personalization), which are identified and tested in this thesis. Our implications for managements are listed below:

Firstly, the online shop should pay attention to website design regarding the suitable/special content, suitable linkage/choice, network connection, navigation (to know where you are and where are you going, find and understand the information easily, and offer fast and logical maneuverability), visual characteristics (structure/layout) and opening for 24 hours. Moreover, the well-performing search engine; friendly links, images, backgrounds, and colors on the website; e-scape of the website; and timely, informative as well as user-friendly databases should also be focused on.

Secondly, the dimensions of reliability imply that it is very important for the online shop to provide the accurate information on the website, fulfill orders correctly, deliver the product follow the schedule, and keep the personal information secure for the perceived e-service quality in online shopping. Moreover, it is also significant for the online shop to follow their promises to customers and build a good brand for the strategies of the online shop.

Thirdly, the online shop should pay attention to reliability, e.g. providing the appropriate service/information to customers when a problem occurs, providing the fast navigation speed, arranging for online guarantees and quickly responding to customer requests. Besides, the information retrieval is also influential for the online shop to better understand the customers.
Fourthly, the online shop should put more efforts on the dimensions of trust, which are the per/after purchase knowledge, and information contents (i.e. the information provided by the store about their policies/guarantees and the other information provided to customers on the website). In addition, the interface properties (i.e. graphics, colors, etc), the background information of the online shop, and different kinds of advertisement are also crucial things for the managements.

Finally, the study on personalization suggests that the online shop should satisfy the individual customer’s unique needs. Besides, it is also very meaningful for the managements to understand the customers by providing individual attention, personal acknowledgements which customers note from online stores, and availabilities of message areas for customers to make comments and suggestion.

7.2.2 Implications for Theories

The contribution has been made to support and enrich the existing theories about the perceived e-service quality in online shopping. Moreover, based on the existing theories, this study has tested how the five dimensions (i.e. website design, reliability, responsiveness, trust, and personalization) affect the perceived e-service quality in online shopping. Finally, through this study, we have discovered five new factors or dimensions from the case studies. These entirely new factors or dimensions will affect the perceived e-service quality in online shopping:

- The first new factor that may emerge as a possible determinant of the website design affecting the perceived e-service quality is that the website should provide the friendly links, which will attract the customers to surf on the online shop and give customers more choices.
- The second possible new determinant of the website design affecting the perceived e-service quality is that the online shop should work for 24 hours, which will provide more conveniences to customers.
- The third new factor, which belongs to the determinants of the reliability, affecting the perceived e-service quality is that when the online shop delivers the products/services to their customers, the online shop should trace the transporting process and timely inform the customers.
- The fourth possible new determinant of the reliability affecting the perceived e-service quality is the brand.
- The fifth new factor that may become a possible determinant of the trust affecting the perceived e-service quality is different kinds of advertisements.

7.2.3 Implication for Further Researches

With the rapid development of e-commerce in online shopping, a lot of areas are emerging. In this study, we only focus on the e-service quality from the customers’ perspective and there are some areas that are not covered. Future researches could be conducted by extending the current study in the following aspects: Firstly, this study just conducts how the five dimensions proposed by Lee
and Lin (2005) affect the perceived e-service quality in online shopping. Future studies maybe explore how the dimensions proposed by other researchers affect perceived e-service quality. Secondly, this study is conducted from the customer’s perspective. Future research may also study the e-service quality from the businesses’ perspective. Thirdly, future research can investigate more samples from different countries or places instead of samples only from Luleå University of Technology. Future research can also be conducted using different research strategies, such as the survey instead of the case study. Fourthly, as mentioned in Section 7.2.2, several new factors or dimensions are identified in this study. Further research need to further test and address how these new factors affect the perceived e-service quality in online shopping.
References


References


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Appendix I: Interview Guide

Gender

Age

Profession

How long have you been using Internet?

How long have you been using online shopping?

What is/are the name(s) of the online shops that you have ever bought products/services from?

According to your experience(s), if some of the online shop’s e-service quality is not good, please mentions the name(s) of the website(s) and explain why.

Which facts affect your perceived e-service quality when you purchase online?
How these factors affect perceived e-service quality?

RQ1: How does the web design affect the perceived e-service quality in online shopping?
- How important is it that you know where you are and where you are going on the web site for the perceived e-service quality in online shopping? Why?

- How important is it that you find the information, which you want, and that you understand the information on the web site for the perceived e-service quality in online shopping? Why?

- How important is it that the website provides you the well-performing search engine and offers the fast and logical maneuverability on the website for the perceived e-service quality in online shopping? Why?

- How important is images, backgrounds, colors, and structures/layouts of the website for the perceived e-service quality in online shopping? Why?

- How important is it that the website provides the suitable or special contents for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop has timely, informative and user-friendly database on the website for the perceived e-service quality in online shopping? Why?
• How important is it that the website provides the suitable linkage for the perceived e-service quality in online shopping? Why?

• How important is the network connection speed on the website for the perceived e-service quality in online shopping? Why?

• How important is it that online shop works for 24 hours on the website for the perceived e-service quality in online shopping? Why?

Do you want to say more factors that affect the website design for the perceived e-service quality in online shopping?

RQ2: How does the reliability affect the perceived e-service quality in online shopping?
(The reliability represents the ability of the website to fulfill orders correctly, deliver promptly, and keep personal information secure)

• How important is it that the information provided on the website is accurate for the perceived e-service quality in online shopping? Why?

• How important is it that the online shop fulfills your orders correctly on the website for the perceived e-service quality in online shopping? Why?

• How important is it that the online shop delivers the products or services promptly on the website for the perceived e-service quality in online shopping? Why?

• How important is it that the online shop keeps your personal information secure on the website for the perceived e-service quality in online shopping? Why?

Do you want to say more factors that affect the reliability for the perceived e-service quality in online shopping?

RQ3: How does the responsiveness affect the perceived e-service quality in online shopping?
(The responsiveness describes how often an online store voluntarily provides services, e.g. the customer inquire, information retrieval and navigation speed, which are important to its customers)

• How important is it that the online shop provides the service about customer inquiries on the website for the perceived e-service quality in online shopping? Why?
Appendix I

- How important is it that the online shop responds you promptly by Email, SMS, Tel, or online communication for the perceived e-service quality in online shopping if you give an online shopping suggestion? Why?

- How important is it that the online shop retrieves the information of your suggestions for the perceived e-service quality in online shopping? Why?

- How important is it that the navigation speed on the website for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop arranges for online guarantees on the website for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop provides a quick response to requests on the website for the perceived e-service quality in online shopping? Why?

**Do you want to say more factors that affect the responsiveness for the perceived e-service quality in online shopping?**

**RQ4: How does the trust affect the perceived e-service quality in online shopping?**

- How important is it that the online shop has a good store reputation for the perceived e-service quality in online shopping? Why?

- How important is it that you discover the very comfortable graphics and colors on the website for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop provides the information about policies/guarantees on the website for the perceived e-service quality in online shopping? Why?

- How important is it that you find the background information of the online shop on the website for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop provides the very necessary and good information for you on the website for the perceived e-service quality in online shopping? Why?

**Do you want to say more factors that affect the trust for the perceived e-service quality in online shopping?**
RQ5: How does the personalization affect the perceived e-service quality in online shopping? (The personalization involves the individualized attentions, the personal thanks which customers note from online stores, and the availabilities of a message area for commenting customer questions)

- How important is it that the online shop shows cares in collecting you personal information from questionnaires by conducting interviews, observing customers’ behaviors online through the use of a cookie, and analyzing customers’ earlier purchase behaviors for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop should give different customers different needs as long as they need them for the perceived e-service quality in online shopping? Why?

- How important is it that the online shop satisfies your individual need when you need it for the perceived e-service quality in online shopping? Why?

Do you want to say more factors that affect the personalization for the perceived e-service quality in online shopping?

Are there any other important factors or dimensions besides the factors and dimensions mentioned above in your opinion that affect the perceived e-service quality in online shopping during the interview?

Thank you very much!