Effective User Interface Design for Consumer Trust
Two Case Studies

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ABSTRACT

Business-to-Consumer (B2C) e-commerce is expected to grow up at aggressive rates in future years. Since e-commerce stretches interactions over space and time, and thus requires more trust than traditional shopping. So, as one of the most important factors that is slowing down this growth is the lack of trust of potential customers. Therefore, developing customers’ initial trust in e-businesses is critical for many online vendors, especially for startup companies. The purpose of this paper is to investigate how interface design can help to build initial trust in B2C e-commerce sites based on the antecedents of trust from past studies. We found a strong relationship between interface quality and trust. As well as we identified cues in the user interface that help to build trust to some extent, and some cues that have a great potential for destroying trust.
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Chapter One

Introduction and Research Problem

In the first chapter, an introduction and a background of this research will be presented. Background of this research begin with conceptualization consumer trust, cues and determinations of initial trust, then moves to importance of user interface design. Subsequently, it narrows to down research problem and finally states the disposition of this thesis.

1.1 Introduction

E-commerce is one of the most visible examples of the way in which information and communication technologies can contribute to economic growth, it allows businesses and entrepreneurs to become more competitive (Annan, 2002). Ecommerce, e-commerce, or electronic commerce is defined as the conduct of a financial transaction by electronic means. With the growth of commerce on the Internet and the Web, ecommerce often refers to purchases from online stores on the Web, otherwise knows as e-commerce Web sites. They may also be referred to as "virtual-stores" or Cyber stores (Straight-On Internet Consulting, 2005).

E-commerce can be business to business (B2B) or business to consumer (B2C).

Business-to-Business (B2B) refers to companies buying from and selling to each other online. But there's more to it than purchasing. It's evolved to encompass supply chain management as more companies outsource parts of their supply chain to their trading partners. (Patton, 2001)

Business-to-Consumer (B2C) refers to any business or organization sells its products or services to consumers over the Internet for their own use. However, in addition to online retailers, B2C has grown to include services such as online banking, travel services, online auctions, health information and real estate sites. (Patton, 2001)

In this thesis, we would limit our analysis to “Business to-Consumer” applications and more specifically to retailing.

E-commerce provides new business opportunities, reduces costs, and facilitates exchanges with business partners and customers (Gartner Group, 2000). Despite the important business opportunities provided by E-commerce, many factors still prevent its development. According to Dinnie (1999), these factors are the lack of proper security mechanisms, inappropriate use of technology. From the customer’s point of view, many studies (such as Furnell & Karweni, 1999) have shown they lack confidence in the security of transactions, are concerned about the confidentiality of their personal information and mistrust the partner-supplier. Technological advances have permitted
many improvements in terms of insuring higher levels of security. But establishing trust in trading partners still remains a major hurdle that restricts how they interact and do business electronically (Ratnasingham, 1998). It has been suggested that elements of human computer interface design have a significant influence on customer attitudes and perceptions of the trustworthiness of a supplier (Kim & Moon, 1998, Cheskin Research, 2000, Nielsen & Norman, 2000, Egger, 2000).

1.2 Background

1.2.1 Online Trust

The concept of trust has been widely studied by researchers in many scopes. For the purpose of the present study, we adopted the definition from Mayer and al. (1995), “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action to the trustor, irrespective of the ability to monitor or control that other party”. Buyers look for signs from sellers that increase their trust, and sellers look at ways they can help build buyers’ trust.

Working to develop a trustworthy exchange site is important for several reasons. Trust is required for all willing transactions, and without it, no market could function (Zucker, 1986). Trust creates more favorable attitudes towards suppliers as well as customer loyalties (Schurr & Ozanne, 1985) and “helps partners project their exchange relationships into the future” (Doney & Cannon, 1997). Trust enhances competitiveness, reduces transaction costs, and mitigates opportunism in uncertain contexts (Doney & Cannon, 1997). In sum, working to develop a trustworthy exchange site yields a competitive advantage.

As we know trust is an essential component of all successful buyer-seller relationships, the emergence of online businesses has brought about new challenges for building trust, in both B2B and B2C business environments. For “business-to-consumer” applications, trust between parties is established very differently from “business-to-business” environments because the relationship is often very short term and more “transaction” focused. Trust is also more difficult to install when there is no pre-existing institutional confidence (Saminathan and al., 1999, Salam and al., 1998).

Furthermore, with the evolution of new e-business models and the advances in information technology, it bring more challenges than solutions for establishing and maintaining trust in the electronic marketplace. Both academicians and practitioneres are looking for clearer answers to enhance and build trust, constituents of trust, the extent to which trust plays a role in buyer-seller relationships, and the measurement of trust in online business contexts.

1.2.1.1 Two Types Consumer Trust

Here we must distinguish two types of trust. The first type, initial trust, refers to a new situation where, say, a prospective customer assesses the trustworthiness of a merchant
based on third-party information and surface cues. The second type, trust based on direct experience, presupposes an initial transaction, followed by an evaluation of the outcome. As such, it affects the long-term orientation of the relationship (Egger, 2001). In this thesis, the stress will be on designing for initial trust.

1.2.1.2 Cues for Initial Trust

When a user is ready to purchase a product online, how does that user assess which online stores are trustworthy and which are not? In the brick-and-mortar world, a user can rely on physical cues such as the neighborhood location, physical size, presence of customers, and interior feature of a store to help assess that store’s trustworthiness. However on the Internet, those same physical cues are not available and a user must rely on other cues such as the privacy policy, visual aesthetics, and navigation quality of an online store to help assess that store’s trustworthiness (Bailey et al.). They also noted that trust is a dynamic process that strengthens or weakens over time based on a customer’s experience. Thus, an exchange site must provide a strong set of trust cues to establish an initial perception of trust, but afterward, that site must provide positive experiences for a customer in order to strengthen or at least maintain that initial perception of trust (Bailey et al.).

1.2.1.3 Trust building mechanisms

“Trust is hard to build-and easy to lose. A single violation of trust can destroy years of slowly accumulated credibility” (Nielsen Norman Group, 2001). Based on the antecedents of trust from past studies, trust can be diminished or lost due to problems such as inferior product quality, poor content of the Web site, complex or unintuitive navigation, technology failure(s), inferior customer service, poor response time, and problems in order fulfillment. Companies should avoid these problems and focus on enhancing online trust (Shankar et al., 2002). Online trust can be enhanced in several ways. Urban et al (2000) recommend the following ways to building trust online: maximize cues that build web site trust, use virtual-advisor technology to gain customer confidence and belief, provide unbiased and complete information, include information on competitive products and keep promises. Reliability in fulfillment is a key aspect of trust, so firms should increase reliability (Urban et al. 2000). Dayal et al. (1999) suggest that user driven-personalization may be key to enhancing trust at higher levels. The best companies let users set the pace of personalization and of contact from marketers. Trust can be improved by quoting policies of customer satisfaction, returns and refunds (Jarvenpaa et al. 2000). Online trust can be enhanced by giving consumers the opportunity to be anonymous or pseudonymous when engaging in information exchanges and online transactions (Hoffman, Novak and Peralta 1999).

1.2.1.4 Determinants of Trust

Here we would reviews relevant studies on the subject of the trust elements, which are often referred to dimensions, determinants, or principles of online trust.
Gefen (2002) examined trust from a multi-dimensional perspective. According to the researcher, the specific beliefs of integrity, ability, and benevolence were seen as antecedents to overall trust. In the case of e-commerce, integrity was the belief that the online merchant adhered to stated rules or kept promises. Ability was the belief about the skills and competence of the online merchant to provide good quality products and services. Benevolence was the belief that the online merchant, aside from wanting to make legitimate profits, wanted to do good to the customer without regard to making a sale.

Based on the literature from multi-disciplines, Kim, Song, Braynov, and Rao (2001) stated the determinants of online trust is divided into six dimensions, namely information content, product, transaction, technology, institutional, and consumer-behavioral dimensions. These dimensions, which were further broken down into many sub-dimensions or properties, formed a theoretical framework of online trust, covering the different stages that a consumer went through to complete an online transaction. In differing from most researchers, Kim et al. (2001) proposed that the consumer could perceive trust before, during, or after the online transaction. The researchers further concluded that different determinants of trust were associated with different stages of the transaction.

Hemphill (2002) conceptualized the foundation of online trust in terms of five fair information practice principles. Three principles are relevant to the design of a web site. It was argued that an online merchant should post the business’s policies on disclosure of personal information, provide options for how a consumer’s personal data might be used in other contexts, and allow consumers to access and view personal data. Importantly, the author argued that ‘‘without an enforcement and redress mechanism, a fair information practice code is merely a suggested set of guidelines rather than a prescriptive mechanism, and does not ensure compliance with the fair information practice principles’’ (Hemphill, 2002). The three practice principles are used for our research purpose.

1.2.2 User Interface Design
User interface design is the overall process of designing how a user will be able to interact with a system/site. New technologies provide extraordinary-almost powers to those people who master them. A fundamental reality of application development is that the user interface is the system to the users. It includes three aspects Structure Design, Interactive Design and Visual Design. What users want is for developers to build applications that meet their needs and that is easy to use. Too many developers think that they are artistic geniuses – they do not bother to follow user interface design standards or invest the effort to make their applications usable, instead they mistakenly believe that the important thing is to make the code clever or to use a really interesting color scheme. Constantine (1995) points out that the reality is that a good user interface allows people who understand the problem domain to work with the application without having to read the manuals or receive training.
1.2.2.1 The importance of user interface design
Constaine (1995) revealed interface design is important for several reasons. First of all the more intuitive the user interface the easier it is to use, and the easier it is to use the cheaper it is. The better the user interface the easier it is to train people to use it, reducing your training costs. The better your user interface the less help people will need to use it, reducing your support costs. The better your user interface the more your users will like to use it, increasing their satisfaction with the work that you have done. The point to be made is that the user interface of an application will often make or break it. Although the functionality that an application provides to users is important, the way in which it provides that functionality is just as important. An application that is difficult to use won’t be used. It won’t matter how technically superior your software is or what functionality it provides, if your users don’t like it they simply won’t use it. So don’t underestimate the value of user interface design.

Furthermore, from discussing some Interface properties, which refer to the surface cues that make or break the first impression made by a web site, we also could see the importance of user interface design. Given people’s confirmation bias, first-time visitors will unconsciously seek to confirm their first impression rather than falsify it. The two factors under consideration here are branding and usability.

**Branding**
When accessing a site for the first time, the first response is likely to be an emotional one. The appeal of the interface, in terms of graphic design and layout, can directly affect the acceptability and usage of the system. More specific attributes of branding are the easy identification of the company and its activity sector, e.g. by means of a prominent logo and slogan. Another element likely to have a significant influence at this stage is how prominently the company presents its main selling points. This can arouse people’s curiosity and motivate them to explore the site further. Since the first contact is all about presentation, professionalism is also a key factor. For instance, outdated content, broken links and typographical errors have all been reported to decrease a site’s credibility and trustworthiness (Nielsen Norman Group, 2000; Fogg et al, 2001).

**Usability**
When prospective customers start exploring a web site, the ease and the efficiency with which they can access relevant information can affect how much they feel in control of the site. Obviously usability is one of the most important determinants for the success of an e-commerce site. The first law of e-commerce states: “if the customer cannot find the product, the customer cannot buy the product.” Each and every usability deficiency in a design becomes an obstacle to the shopper’s ability and willingness to buy. Low usability equals lost sales. The more pleasant and trustworthy a site seems, the more likely people are to return. The easier it is for shoppers to find what they are looking for, the more they buy. And the more the product descriptions and other content satisfy customers’ needs, the more likely they are to spring for high-ticket items. (Nielsen Norman Group, 2001)
1.2.2.2 Importance of User Interface Design to Consumer Trust
Consider shopping in the real world: When a customer enters a shop for the first time, she sees the interior, goods and the sales staff. The customer may not conduct any risk evaluation at all, because shopping is a habit she does not perceive as risky. But the visual cues allow her to evaluate the shop's professionalism, competence and trustworthiness via a comparison with other shops. As online transactions are stretched over space and time, they are dis-embedded (Giddens, 1990). Dis-embedding is a common phenomenon in modern societies. It makes decisions more complex (Luhmann, 1979) and increases the need for trust (Giddens, 1990). Hence, designers of e-commerce systems need to design these systems in a way that allows users to build trust (e.g. in B2C e-commerce) but also to encourage trustworthy behavior among users (e.g. in C2C e-commerce).

1.3 RESEARCH PROBLEM
Based on the discussion above, we could know the importance of trust in commercial relationship.
Like Furnell and Karweni (1999) stress that, “while trust has always been important in business, it will become even more so in the on-line world with its expanding choices and declining switching barriers.
Furnell and Karweni (1999) also mention the further reasons why the role of trust is even more important in electronic transactions, because:
- Business partners often do not know each other;
- There is less control over data during their transfer;
- The partners may be located in different or even in unknown locations, where rules and regulations may vary.
Ratnasingham (1998) stress the importance of trust in the virtual world too. Due to the fact that parties involved in a transaction are not in the same place, and therefore cannot depend on things like physical proximity, handshakes and body-signals, she means that it may be even more important in the virtual world than in the real world. In addition, any one of the parties may be in a completely different country, and transaction on the Internet may not be subject to the laws of any particular country or state at all.

Commerce Net (1997) refers consumers' lack of trust has often been cited as a major barrier to e-commerce growing. In addition Dayal, Landesberg and Zeisser (1999) note that consumers also fear exploitation of their identity when using the Internet.

Since in B2C applications, the relationship is often very short term and more “transaction” focused, trust is also more difficult to install when there is no pre-existing institutional confidence.
So that there is a clear need for substantive and methodological knowledge about consumer trust in B2C e-commerce.

Some previous research has shown the impact of Web site design on the customer’s initial perception of the company. Kim and Moon (1998), for instance, performed a study
where the manipulation of different interface design factors could induce customer confidence. More recent studies (Cheskin Research, 2000, Cheskin Research and StudioArchetype, 1999) suggested that other interface elements were important to establish trust: The ease of navigation and feedback mechanisms. Nielsen and Norman (2000) also emphasize the importance of “usability” in web sites. Finally, Egger (2000) proposed a model of customer trust in on-line transactions. Interface issues such as usability, attractiveness and perception appear as important determinants of trust in this model. While these studies all contribute to our knowledge about trust design, but little is known about how to build trust mechanisms using interface design in B2C e-commerce.

From above discussing, the research problem for this study could be formulated as:

To describe and discuss how user interface design can affect consumer initial trust towards unfamiliar websites.

The purpose of this thesis is to gain a better understanding on how interface design can help to build initial trust in B2C e-commerce sites.
1.4 DISPOSITION OF THE THESIS

This research paper consists of seven chapters, as shown in figure 1. In the first chapter, an introduction, background and research problem is presented. In the second chapter we will introduce previous literature review related our topic. Research questions and conceptual framework will be given in the third chapter. In the fourth chapter, the methodology user for this thesis will be discussed. In the fifth chapter, data from observation and interviewee response will be listed. In chapter six, the finds will be analyzed based on frame of reference and comparison literature review. Finally, the conclusion, contribution and findings of this research will be presented in chapter seven.

Figure 1: Thesis Structure

Source: Authors’ own source
Chapter Two

Literature Review

In this chapter we will introduce the different theories that are connected to building trust on the Internet. Several of understanding and modeling trust in e-commerce will be given, and specialize in trustworthiness be communicated in user interface design. The source of literature review we adopt is from academic research and industrial report.

2.1 Trust in E-commerce: Academic Research

2.1.1 Types of Trust

In the e-commerce context, trust has been defined rather narrowly or broadly. Kim and Tadisina (2005) summarized the types of process-based trust. (Table 1)

<table>
<thead>
<tr>
<th>Trusting Belief</th>
<th>Trusting Attitude</th>
<th>Trusting Intentio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive</td>
<td>Confirmative</td>
<td>Active</td>
</tr>
<tr>
<td>Trustor’s feelings about trustee</td>
<td>Trustor’s confidence in and affect for trustee</td>
<td>Trustor’s willingness to be involved in a relation with trustee</td>
</tr>
<tr>
<td>It can be developed in a short period of Time.</td>
<td>It usually requires longer time and leap of faith</td>
<td>Trustor needs to assume risks</td>
</tr>
<tr>
<td>Temporary (it may be fragile)</td>
<td>Relatively permanent</td>
<td>It leads to trustor’s behavior</td>
</tr>
<tr>
<td>Initial trust</td>
<td>Robust trust</td>
<td>Contingent trust</td>
</tr>
</tbody>
</table>

*Source: Kim & Tadisina (2005), p2*

As we described in Chapter 1, in this paper we focus on initial trust and propose that trusting belief can be used as a surrogate for initial trust.

2.1.2 Trust Pyramid

Dayal, Landesberg and Zeisser (1999) refer to Building trust that leads to satisfied customers is complex—but essential—for marketing executives. Dayal et al (1999) have identified six elements that build a "trust pyramid" (figure 2)). The base of the pyramid shows the three core elements needed just to be in the game: state-of-the-art security,
merchant legitimacy, and robust order fulfillment. Winning marketers move well beyond the basics with more subtle trust builders that differentiate them from the also-ran: consumer control, tone and ambience, and, at the highest level, consumer collaboration. As the baseline level of trust and security rises, these points of distinction become more critical. Taken together, the six elements of trust create the confidence needed to turn browsers and ordinary customers into site loyalists.

![Trust Pyramid](image)

**Figure 2. Trust Pyramid**

*Source: Dayal, Landesberg and Zeisser (1999), p64*

Based on the Trust Pyramid, Dayal et al (1999) present the six elements as follows:

- **State of the art security**
  Use the best security measures on your site, and tell your consumers about them in easily understandable language. Shoppers at Netmarket are assured of "guaranteed safe shopping" with a no-compromises promise: "At Netmarket, you can shop with confidence. By using the latest encryption technology, digital certificates, secure commerce servers, and authentication to ensure that your personal information is secure on-line."

- **Merchant legitimacy**
  Brands are important on the Web. They help shoppers sort out their choices when they have a limited range of clues as to the quality and function of a product. Familiar names with established records of performance go a long way toward building trust—so long as marketers continue to deliver that performance through their Web ventures. If your company lacks a recognizable consumer brand, three tactics can get you in the game: Sell branded products, Ally your product or service with an established brand and Encourage
prospective customers to sample your services through low-risk trials and creative offers.

- **Fulfillment**
  Great security and brands can go only so far; a trust-building site must also fulfill orders efficiently and with minimal hassles. Nothing alienates a buyer more than getting thrown off-line, finding the site frozen, or making a wrong entry that causes the loss of pages of entered information.

- **Control**
  Even with credit card security assured, consumers learn to trust the marketers they deal with only when they know that they—not the marketers—control access to personal information. Marketers who ask permission for personal details are taking the smart approach.

- **Tone and Ambience**
  Trust building encompasses more than the strictly technical aspects of a Web site. Consumers want to know that marketers will handle their personal information with sensitivity. Without ironclad confidentiality, consumers will never move ahead with a value exchange. Leading marketers post an easy-to-read privacy statement and explain how they collect and handle customer information. Design and content are other critical elements, the importance of ease of site navigation is one influence. A site’s appearance also says a great deal about a marketer. Drawing on the next wave of personalization technologies, marketers will be able to customize the on-line store ambience for each consumer. Marketers set the right tone with their customers when they are straight about all aspects of the relationship, such as how they deliver services.

- **Collaboration**
  A site nurtures trust when it encourages its customers to inform each other about the company’s product and service offerings. A Yankelovich Partners survey reveals that consumers consider other users of a product to be the most trusted source of advice when considering a purchase of that product. Thus, chat groups let consumers query each other about their purchases and experiences.

### 2.1.3 Initial Trust

In Kim and Tadisina (2005) study, they defined initial trust as one that invokes and maintains an initial relationship before the relationship becomes a committed one. Practically, it is the customers’ belief that an e-business has competence and goodwill. Competence is a customers’ belief that an e-business has ability to do business, and goodwill is the customers’ belief that a company has intention to help customers.

In the e-commerce context, especially business-to-customer, researchers proposed a
number of factors that would affect trust. Kim and Tadisina (2005) concluded the factors that seem to affect initial trust, these factors can be sorted into three categories: customers’ perceptions of the company’s profile, customers’ perceptions of the supporting organizations related to the company, and customers’ perceptions of the company’s website quality as shown in table 1

Table 2: Factors Impacting Initial Trust

<table>
<thead>
<tr>
<th>Sources</th>
<th>Company Profile</th>
<th>Supporting Organization</th>
<th>Website Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jarvenpaa &amp; Tractinsky</td>
<td>Size Reputation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fung &amp; Lee</td>
<td>Company reputation</td>
<td>Information quality</td>
<td>Web interface quality</td>
</tr>
<tr>
<td>Stewart</td>
<td>Transference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McKnight et al.</td>
<td>Reputation building</td>
<td>Third party seals</td>
<td>Perceived site quality</td>
</tr>
<tr>
<td></td>
<td>Links to other sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gefen &amp; Straub</td>
<td></td>
<td></td>
<td>Social presence</td>
</tr>
<tr>
<td>Gefen et al.</td>
<td>Familiarity</td>
<td>Structural assurance</td>
<td>Perceived ease of use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Situational normality</td>
</tr>
</tbody>
</table>

Source: Kim & Tadisina (2005), p3

2.1.4 User Interface Design for Consumer Trust

Kim (1997) introduces a conceptual, higher-level approach to B2C e-commerce. He starts off by distinguishing between the user interface, more concerned with ease of learning and ease of use and the customer interface which, in addition, "should provide a pleasant shopping environment" (p. 12). Indeed, it is crucial that e-commerce interfaces should attract consumers, thereby converting them into potential customers. Indeed, if consumers do not feel attracted by an online shop's interface, they will simply switch to other online vendors. Kim (1997) identifies four dimensions of customer interface design:

- **Content design** refers to the type and scope of information provided about products and services. This information, Kim argues, should be appropriate for users to construct an appropriate mind map to assess whether a product is worth purchasing.
**Structure design** refers to the way knowledge of the domain is organized in the electronic shop, so that it is in accordance with the customers' mental model of the domain. This is especially important in the case of product categorization.

**Navigation design** refers to the site's architecture and to the design aspects that minimize user costs when navigating the site, such as, e.g., user support in the form of search engines.

**Graphic design** refers to the graphical representation of the site's architecture, navigational aids, use of logos, colors, layout, etc. It is thus assumed that different graphic elements can have crucial effects on the feelings of customers.

Kim and Moon (1998) conducted a study to investigate precisely which graphic design elements were most likely to communicate trustworthiness in cyber-banking interfaces. That is, they focused exclusively on the impact of visual design features on the feeling of trustworthiness, at the expense of the system's informational content.

Their results indicate that a cyber-banking interface induces more trust if it contains a clipart image that is "3D, dynamic and covers half of the total screen size" and if the colors used have got a "cool tone", if the main colors are "pastel and of low brightness". This, they argue, would lend support to the hypothesis that manipulating visual properties of a user interface can affect its experienced trustworthiness. However, Kim and Moon (1998) admit to some methodological flaws, as, for example, the passive presentation of stimuli and the homogeneity of the subjects' experience with the Internet and socio-cultural background. In addition, no comprehensive analysis of the interactions between the different design factors was carried out. This implies that, depending on which design factors are combined, the trustworthiness of the interface can either increase or decrease. Their focus on graphics alone is all the more surprising, as Kim (1997) acknowledged the importance of content design in the classification he had proposed one year earlier. The argument remains that a more holistic approach to the design of trustworthiness into interfaces would yield more valid results.

In trust context, Lin et al. (1997) developed a general index of interface usability

- **Ease of navigation**: Ease of finding what you want and knowing where you are in the Web site.
- **Consistency**: In human-computer interaction, consistency is recognized to be able to improve user performance and user satisfaction. It applies internally to the web site and externally to other websites through standards and conventions.
- **Learnability**: A well-designed interface should be easy to learn. This is achieved through the use of simple and clear language, meaningful display and logical grouping
- **Perceptual limitation (perception)**: A good interface design should embed the considerations of human perceptual organization limitations.
- **User guidance or support**: A good user guidance scheme will improve learnability and decrease the mental workload.
2.1.5 A Model of Trust for E-commerce

The Model of Trust for Electronic Commerce (MoTEC), initially developed by Egger (1998) and refined in Egger (2000), Egger and De Groot (2000) and Egger (2002). The model attempts to regroup an important number of factors that have been observed to affect consumers' judgment of an online vendor's trustworthiness. Not only does the model list these factors, it also classifies them into different components or interaction phases. This model applies to the selling of products and services in a business-to-consumer situation. Since his focus on initial trust, the model has been structured around the different phases a visitor goes through when exploring an e-commerce website for the first time. It is constituted of the following four dimensions, which all contain several Components as will be shown below (figure 3):

![Figure 3. The Model of Trust for E-commerce](image)

Source: Egger (2001)

According above the model illustration, the model is based on the four dimensions. Firstly, the metaphor that people’s predisposition to trust and pre-knowledge determine an initial trust value even before a merchant web site is accessed. Secondly, as one explores a new site for the first time, the first impression made by a system, in terms of graphic design and usability, will lead to a re-assessment of that trust value. Thirdly, as one examines cognitively more demanding factors, such as the company’s competence or the risk of a transaction, one’s trust value is bound to change once again. The fourth dimension, relationship management, refers to the handling of inquires or orders over time. Whether communication happens before or after ordering, the responsiveness and the quality of the help may also affect one’s level of trust. This model shows that trust can be affected by both emotion and cognition, in both implicit and explicit ways. One should add that the evaluation of interface properties does not necessarily precede the evaluation
of informational content; however, the former, *qua* means, is often required for the latter. (Egger, 2001)

In Egger (2003) research, he presents above the four dimensions. In addition, since our interesting is about initial trust, in particular we focus on interface design, here only pre-Interactional Filters and Interface Properties will be given in great detail.

2.1.5.1 Pre-interactional Filters

The first model dimension consists of Pre-interactional Filters (PIFs), that is, factors that can affect people’s perceptions even before a particular e-commerce system is accessed for the first time. As shown in Table 3, there are two main types of PIFs: user psychology and foreknowledge.

<table>
<thead>
<tr>
<th>Table 3 : Pre-interactional Filters: Components &amp; sub-components</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension 1: Pre-interactional Filters</strong></td>
</tr>
<tr>
<td><strong>User Psychology</strong></td>
</tr>
<tr>
<td>General propensity to trust</td>
</tr>
<tr>
<td>Trust in IT and the Internet</td>
</tr>
<tr>
<td>General attitude towards e-commerce</td>
</tr>
<tr>
<td><strong>Pre-purchase Knowledge</strong></td>
</tr>
<tr>
<td>Reputation of the industry</td>
</tr>
<tr>
<td>Reputation of the company</td>
</tr>
<tr>
<td>Transference (offline and online)</td>
</tr>
</tbody>
</table>

*Source: Egger (2003), p48*

- **User Psychology**

When trying to identify factors susceptible to have an effect on a consumer's judgment of a vendor's trustworthiness, there are three types of psychological predispositions that need to be highlighted.

*General Propensity to Trust:* Research has shown that there are large individual differences in terms of readiness to trust another party, be it a person, a group or a business (cf. Rempel et al., 1985). This fact can be accounted for by a variety of philosophical and moral attitudes about the goodness of others, as well as by different personal experiences. Cultural factors are also likely to play a role as it has been found, by example, that that Americans and Japanese trust more readily than Chinese and French (Fukuyama, 1995). Jarvenpaa et al. (1999) have also investigated the possible effect of culture on people’s trust in e-commerce websites but did not find a significant effect of culture in the sample they tested.

*Trust in IT and the Internet:* People’s amount of experience with information technology (IT) has a direct effect on how confident they feel using this technology. For example, previous experience helps them discriminate between task-critical and less important error messages. Of course, prior experience with the Internet is particularly relevant, given the potential reliability problems a person might have experienced with connections to the network. Additional factors that may affect a person’s attitude towards the Internet are the context of use (home and/or work), the type of Internet access (modem, cable, etc.) and cost. Generally, a person’s expertise in the underlying
technology also affects the extent to which the medium is perceived to be reliable and, thus, technologically trustworthy.

**General Attitude towards E-Commerce:** Although a third of the population forms the "early adopters of almost anything" (Keen, 2000), two-thirds will need good arguments and the benefit of other people’s experiences to feel confident enough to embrace e-commerce as a new commercial medium. It appeared in user tests reported in Egger (1998) that people are extremely influenced by the media. As negative shopping experiences are more likely to be reported than positive ones, the way online security is portrayed may be rather biased. Interestingly, novice users with no or little knowledge about encryption might not be worried by the lack of it when transacting over the net. As to expert users, they can typically be split into two categories: those who are aware of the importance of secure connections and trust them; and those who are skeptical about the actual level of security provided by these so-called “secure” connections. Besides, the problem may not lie solely in the connection per se, but also in the way data are stored on a merchant’s system. Diversity in predispositions to trust also entails that trust-inducing design features, however well implemented, will never be enough to convert a generally mistrusting individual into a trusting customer.

**Pre-Purchase Knowledge**
A second important factor is people’s foreknowledge and expectations with respect to a certain domain, industry or company. Such pre-purchase knowledge can strongly influence their attitude towards one particular e-business before its website is actually accessed (Good, 1988; Jarvenpaa et al., 1999). As Robinson (1996) puts it: “One builds probabilistic beliefs about the [other] party based on rational reasons, such as the past behavior or of experience with that other party” (p. 578).

**Reputation of the industry:** For instance, some people may have a rather negative perception of direct marketing companies (cf. Egger & De Groot, 2000) or secondhand car dealers. This entails that these people will approach online systems of such companies with more mistrust than other systems. When it comes to international business, a similar line of reasoning can be held for associations one might have with particular regions. For instance, people might have more trust in Swiss banks than in banks from a politically and economically unstable country.

**Reputation of the company:** This refers to one’s offline experience with a specific company and/or associated businesses. This experience can be both indirect and direct. Indirect experience is mostly related to brand awareness, i.e., knowing that a particular company exists, what it offers and how it positions itself in the market. Direct experience, on the other hand, implies active interaction with a particular business, be it walking into a store, buying from a store or talking to a customer representative on the phone. In that respect, both brand awareness and experience are likely to play a crucial role as trust in a brand offline is very likely to transfer to its online extension.

**Transference:** In addition to one’s own experience with a company, as mentioned before, one can also rely on the experience or advice of sources one trusts. The phenomenon of trust transference means that one is very likely to trust another, previously unknown or little known, party if a party one trusts recommends it (Doney &Cannon, 1997).
2.1.5.2 Interface Properties

Interface properties refer to more superficial aspects of an e-commerce website. Superficial should be taken to mean those aspects of an interface that are mostly cosmetic in nature and thus relatively easily changeable. The importance of interface properties lies in the general fact that, in general, “emotional responses precede intellectual ones” (Goleman, 1996). That entails that, superficial though they may seem, interface design features are likely to have a non-negligible effect on a user’s subsequent decision to trust and to buy from an online vendor.

The first component has been termed Branding and refers to a site’s visual design. Design is crucial as it can make a strong first impression when accessing a site for the first time. As Lindgaard (1999) noted, "an immediate negative impression may well determine our subsequent perception of the site’s quality and usability, whereas we may inherently judge a site making a good first impression to be 'better'".

In traditional commerce, Doney and Cannon (1997) distinguished between trust in the salesperson and trust in the company. They identified the salesperson’s expertise, likeability and similarity to the customer as determinant factors to engender trust. Transposed to online commerce, one can hypothesize that the appeal of the interface, the quality of the information provided, as well as the customer-centredness of the system are also likely to have a positive impact on customers’ feeling of trust (cf. Kim & Moon, 1998). Fogg et al. (2002) report that, in their large study about how people evaluate the credibility of websites, almost 50% of all comments made by participants referred to graphic design. They therefore argue that, in the context of online credibility (and trust), findings indicate that looking good is often interpreted as being good - and credible.

The second important component in the Interface Properties is Usability. According to Nielsen (1993), usability should be understood in terms of a system’s learnability, efficiency, memorability, error prevention and user satisfaction. Conceptually, the Usability component is the necessary link between Branding and Informational Content (the third dimension). Indeed, visual design is presented to the user passively, while the user actively needs to navigate the website in order to access relevant information. Usability is all the more important in the context of online shopping as it is known to be an important condition for the acceptance and adoption of new technologies. The Technology Acceptance Model (TAM), as defined by Davis (1989), holds that usefulness and ease of use are both strong predictors of adoption.

As shown in Table 4, two main aspects of interface properties can thus be distinguished: Branding and Usability.
Table 4: Interface Properties: Components & sub-components

<table>
<thead>
<tr>
<th>Dimension 2: Interface Properties</th>
<th>Branded</th>
<th>Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appeal</td>
<td>Organisation</td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td>Navigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td></td>
</tr>
</tbody>
</table>

Source: Egger (2003), p52

- **Branding**

  **Appeal:** This refers to the former *Attitude* component and the first impression one gets when accessing a site for the first time, notably from the home page. Appeal has largely to do with the site’s graphic design and layout. Other elements of branding include prominent information the name of the business, what it does, and what distinguishes it from its competitors. In other words, the online business should be clearly identifiable, be it by a logo or a slogan. A clear statement of what the site is about should also be present, along with the company’s key selling points. This also refers to what Dix et al. (1993) call system likeability and acceptability.

  **Professionalism:** Customer-centredness, as well as attention to detail, can help the site convey a professional image. A company’s investment in setting up a professionally looking site can be perceived as a sign of a financially viable business with a reputation to defend. Therefore, the company may seem less likely to act opportunistically as it would have more to lose than to gain.

- **Usability**

  **Organization:** This refers to the extent to which the site's commercial offerings and resources are made explicit by organizing its content in a manner relevant to the end user (cf. Kim’s 1997 “structure design”). Familiarity in terms of domain knowledge, classification schemes and terminology also fall into this category. In the case of unfamiliar websites, the amount of guidance available, be it in the form of FAQs or a guided tour, can also help first-time visitors familiarize themselves with the system.

  **Navigation:** This has to do with the site’s ease-of-use, in particular, the ease of finding relevant information (minimal click stream). An additional factor is the amount of information users can access without having to register, i.e. engage in a transaction of personal information. Generally, ease-of-use could be perceived as a sign that the company understands, cares for and respects its customers. Related to that is the design of dialogues, i.e. system responses to user input. This encompasses confirmation of actions, feedback, constructive error messages, etc.

  **Relevance:** The degree to which consumers feel that the website is relevant to them also has an influence on their willingness to explore the site further. In addition to localization
issues, such as language, date, time, currencies and other measurement units, customization and personalization might also contribute to the one-to-one experience.

Reliability: System reliability can be affected by a number of factors, e.g., the performance of the website’s servers, the user’s ISP or local network, as well as hardware and software problems. The unreliability perceived by a user can often not be attributed to any specific factor. Novice users have even more problems diagnosing causes of unreliability, often blaming themselves if their system crashes. An important factor in this category is a page’s download time. User expectations were 8s in a 1999 study and down to 4s over any kind of connection in 2000 (Nelson, 2000).

2.1.5.3 Informational Content

As shown in Table 5, the Information Content dimension is constituted of two main components, Competence and Risk, which are further broken down into subcomponents.

Table 5: Informational Content: Components & sub-components

<table>
<thead>
<tr>
<th>Competence</th>
<th>Security</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Policy</td>
<td>Privacy</td>
</tr>
<tr>
<td>Identity</td>
<td>Encryption</td>
<td>Policy</td>
</tr>
<tr>
<td>Values</td>
<td>Payment method</td>
<td>Registration</td>
</tr>
<tr>
<td>Contact</td>
<td>Third parties</td>
<td>Data access</td>
</tr>
<tr>
<td>Achievements</td>
<td>Samples</td>
<td>Subscriptions</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Consumer redress mechanisms</td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>Objectivity</td>
<td></td>
</tr>
<tr>
<td>Contact</td>
<td>Costs</td>
<td></td>
</tr>
<tr>
<td>Achievements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnerships</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Egger (2003), p53

Information about Products & Services should be complete, relevant and structured in a way that reduces user costs. The Company component reflects the need to communicate the merchant’s history, values and commitment. Security refers to the completeness and the understandability of information about financial risk and guarantees. Privacy describes the vendor’s openness with respect to its privacy policy. The commercial party’s competence can be assessed by comparing the first two components, whereas the relationship's inherent risk can be evaluated in the light of the last two components.

2.1.5.4 Relationship Management

Relationship Management reflects the facilitating effect of relevant and personalized vendor-buyer interactions on trust development (pre-purchase) and maintenance (post-purchase), as shown in Table 6
The first type of trust take place is conversion trust, where users gain enough trust to engage in a commercial relationship with an online merchant. Whether that trust will be honored in the long term will depend on the follow-up to the initial transaction, e.g. post-purchase communication and customer service. Communication thus reflects the facilitating effect of frequent and personalized vendor-buyer interactions on trust maintenance.

2.1.6 Online trust Lose

Shankar et al. (2002) stated the extent of gain and loss in online trust could be asymmetric. It is difficult to earn, but is easy to lose online trust for firms. While the process of building online trust can be gradual, the process of losing trust can be steep. Trust can be built incrementally through reinforcing encounters with the firm and its Web site. However, with one major failure or setback, this trust could be lost altogether.

Shankar et al. (2002) based on the antecedents of trust from past studies noted trust can be diminished or lost due to problems such as inferior product quality, poor content of the website, complex or unintuitive navigation, technology failures, inferior customer service, poor response time, and problems in order fulfillment.

Berger and Sasse (2001) stated that most interface elements can be seen as trust qualifiers: they are unlikely to get non-shoppers over the 'trial-threshold'. If not taken care of, however, they have a great potential for destroying trust.

2.1.7 Two Types of Trust Design Guidelines

Since in this research we only focus on user interface scope, here we just stress the interface properties design guidelines.

2.1.7.1 Process-oriented interface properties design guidelines

Process-oriented guidelines refer to the procedures designers should follow to ensure that the end product would be perceived as being trustworthy by the target population.

As far as interface properties are concerned, offline marketing campaigns should be integrated into the design of the online interface. It is important that the different channels all convey the same brand identity to take advantage of people’s familiarity with and expectations about the company and its products. When it comes to functional design, the use of user-centred, iterative design methods is strongly encouraged in order to closely monitor people’s experiences conveyed by the website.

**Take advantage of a familiar brand experience:**
- Ensure that the different channels all convey the same image.
- Integrate offline marketing campaigns into the design of the website.

**Create an interactive brand experience:**
- Take advantage of people’s familiarity with related on- and offline companies.
- Complement online with offline branding channels to facilitate the transfer of trust to the website.

**Convey a professional image:**
- Invest considerable resources for brand positioning, UX strategy and implementation.

2.1.7.2 Product-oriented interface properties design guidelines

As far as branding is concerned, care must be taken to transpose offline brand attributes of a trusted brand to the online system. This not only includes logotypes, corporate colors, fonts and style guides, but also communication style. This helps transfer familiarity of the online company to the online extension. In case a company does not have an offline presence, one can recruit brand attributes from familiar and related trusted companies, so as to constitute an initial trust capital by similitude. Competence-related trust can be facilitated by a professional appearance of the website, both in term of graphic design and writing style (Fogg et al., 2001).

**Take advantage of a familiar brand experience (traditional companies):**
- Transpose trusted offline brand attributes to the website (color scheme, style guide, etc.).
- Meet or exceed people’s expectations about the look-and-feel and functionality of the website.
- Take advantage of the medium’s interactivity for efficient experience branding.
- Allude to the company’s investment in its operations and the size of its customer base (if it is large).
- Pay attention to details, be they graphic, textual or navigational.
- Have a domain name consistent with the brand or company name.
It is evident that good usability is a prerequisite for people to be able to find information on which to base their trust decision. In that respect, web usability guidelines as proposed by Spool (1999) and Nielsen (2000) should be applied whenever possible. Trust-specific user interface guidelines refer mostly to the provision of prominent feedback throughout the shopping process. Allowing for customization, for instance, by allowing users to select their own content and display preferences (e.g. measurement units), also helps communicate the company's commitment to customer-centricity, while making customers feel in control of the interaction.

**Provide easy access:**
Design for cross-platform and cross-browser compatibility.
Avoid the need for plug-ins and downloads on the homepage.
Only use plug-ins if they add value to the presentation of information.

**Be customer-centric:**
Structure the site in accordance with customers’ domain model and expectations.
Present information in a way relevant to the customer: e.g. thoroughly test localized systems.
Minimize click stream for greater efficiency and satisfaction.
Learn and anticipate customers’ preferences: e.g. personalization over time.

**Let the customer be in control:**
Support the browsing behaviors of both novice and expert users.
Inform customers about the procedures required to transact: e.g. overview of steps.
Provide clear feedback to user actions: allow for easy error management.
Allow for customization: e.g. content, language or measurement units.

2.2 **Trust in E-commerce: Industrial Report**

We have presented the academic research above, it is obviously necessary to consider the same topic from e-commerce Company, as they tend to be more reactive and concrete with respect to consumer behavior and website design.

The most influential industry report on trust in e-commerce was produced by Cheskin Research and Studio Archetype/Sapient (1999). Through a questionnaire study, site reviews and interviews with experts, the authors identified six major factors that help communicate trustworthiness, namely: brand, navigation, fulfillment, presentation, up-to-date technology and security, as well as privacy seals. They argue that combining effective navigation with a strong brand is the best way of communicating trustworthiness.

Branding is to the product or company what reputation is to a person. It would, however, be inaccurate to restrict branding to a company’s visual identity, such as its logo and color scheme. Rather, one should think of branding as affecting all touch points between a customer and a company, be they on- or offline. It is therefore important to project an image that is consistent across different media. Creating brand awareness means making its company and services known to consumers in a way that differentiates them from
competitors. For instance, TV ads or online banners are typically used for indirect messaging. Knowing about a brand is certainly not as powerful as experiencing it. Direct experience is employed to create an emotional association with a brand, e.g., by creating a unique, memorable shopping experience.

For new companies with no existing brand name, the report suggests that strong navigation, effective fulfillment and, thus, satisfaction can be effective in communicating trustworthiness. US respondents also found that web-based seals of approval also contribute to communicating trustworthiness. Use and mention of up-to-date technology, in particular as regards encryption was also observed to have a positive effect on consumer trust. It turned out that the most trusted websites were well-known classic brands. This can be explained by the reputation of, as well as personal experience with, these brands offline. The least-trusted sites were obscure, web-only businesses. It is noteworthy that web-only privacy and security seals were perceived as trustworthy only by the people who knew them. An obvious pre-requisite is that consumers should trust the third party and its seals in the first place. Strangely enough, familiar brands of credit card companies, such as VISA or MasterCard, were less of an indication of trustworthiness than web-only trusted third parties like VeriSign or TRUSTe. Given that the participants in this study were all American, it is unlikely that the same applies in other parts of the world.
Chapter Three

Frame of Reference

In this chapter we will formulate our research questions based on the review trust-related online literature and models showed in chapter 2. Subsequently, the emerged frame of reference will be presented.

3.1 Research Questions

In first chapter, we have formulated the research problem for this thesis is: *How the user interface design affects consumer initial trust toward unfamiliar website?* In the prior researches, many authors suggested the quality of the user interface is one of a determinant factor of the initial trust establishment, so we are interested in empirically examining the relationship between user interface properties and initial trust, therefore our first research question is designed to:

**RQ1: Can user interface design have a positive impact on initial trust?**

Then we will put forward study to test the how different interface properties influence the initial trust. Thus, the second research question is designed to:

**RQ2: How can the user interface properties influence initial trust?**

Drawing from literature review, there are many interface design factors could be considered relevant with initial trust, here we only select the concepts from Lin et al and Egger research that were most relevant for first time users of a website, as well we choose to use those factors which would be easier to evaluate after a few minutes of use and applicable to the web environment. The selected factors are shown as Table 7.
### Table 7: User Interface Factors

<table>
<thead>
<tr>
<th>Components</th>
<th>factors</th>
<th>Conceptualization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Branding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appeal</strong> (Egger, 2003)</td>
<td>This refers to the former the first impression one gets when accessing a site for the first time, notably from the home page. Appeal has largely to do with the site’s graphic design and layout.</td>
<td></td>
</tr>
<tr>
<td><strong>Professionalism</strong> (Egger, 2003)</td>
<td>This refers to Customer-centredness, as well as attention to detail, can help the site convey a professional image.</td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong> (Egger, 2003)</td>
<td>This refers to the extent to which the site's commercial offerings and resources are made explicit by organizing its content in a manner relevant to the end user.</td>
<td></td>
</tr>
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<td><strong>Navigation</strong> (Egger, 2003)</td>
<td>This has to do with the site’s ease-of-use, in particular, the ease of finding relevant information (minimal click stream).</td>
<td></td>
</tr>
<tr>
<td><strong>Relevance</strong> (Egger, 2003)</td>
<td>The degree to which consumers feel that the website is relevant to them also has an influence on their willingness to explore the site further.</td>
<td></td>
</tr>
<tr>
<td><strong>Usability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reliability</strong> (Egger, 2003)</td>
<td>System reliability can be affected by a number of factors, e.g., the performance of the website’s servers, the user’s ISP or local network, as well as hardware and software problems.</td>
<td></td>
</tr>
<tr>
<td><strong>Consistency</strong> (Lin et al. 1997)</td>
<td>In human-computer interaction, consistency is recognized to be able to improve user performance and user satisfaction. It applies internally to the web site and externally to other websites through standards and conventions.</td>
<td></td>
</tr>
<tr>
<td><strong>Learnability</strong> (Lin et al. 1997)</td>
<td>A well-designed interface should be easy to learn. This is achieved through the use of simple and clear language, meaningful display and logical grouping</td>
<td></td>
</tr>
<tr>
<td><strong>User guidance or support</strong> (Lin et al. 1997)</td>
<td>A good user guidance scheme will improve learnability and decrease the mental workload.</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Authors’ own source*

According to literature review, we also select two beliefs of Initial Trust: Table 8
Table 8: Two Beliefs for Initial Trust

<table>
<thead>
<tr>
<th>Beliefs</th>
<th>Conceptualization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Competence is a customers’ belief that an e-business has ability to do business,</td>
</tr>
<tr>
<td>Goodwill</td>
<td>goodwill is the customers’ belief that a company has intention to help customers</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

After examine the relationship between user interface and initial trust, consequently we can get the third research questions.

RQ3: How can the B2C company build initial trust by designing user interface be described?

3.2 Emerged Frame of Reference

Frame of Reference of this thesis is revealed as Figure 4.

Interface properties

Source: Authors’ own source
Chapter Four
Methodology

Now we are in chapter 4 where we are going to describe and justify what methods we applied to answer our research questions. We will clarify the reasons why we choose these methods and how to apply them in our data. As figure 5 shows, totally there are 7 small topics which we need to discuss in this chapter.

![Figure 5: Schematic Presentation of the Methodology](image)

Source: Forster (1998), p81

4.1 Research Purpose

When we doing a research, there exist different purposes (Lundahl&Skärvad, 1992). The author conducts three different research purposes: exploratory, descriptive, explanatory. Exploratory studies are a valuable means of finding out “what is happening; to seek new insights; to ask questions and to assess phenomenon in a new light”. An explorative research is suitable when a problem is difficult to demarcate, and when you have not got a clear apprehension about what model to use and which characteristics and relations are important. (Eriksson, Wiedersheim-Paul, 1997). It is particularly useful if you wish to clarify your understanding of a problem. It will be that time is well spent on exploratory research, as it may show that the research is not enough worth pursuing. Descriptive research is often used when a problem is well structured and there is no intention to investigate cause/effect relations. Descriptive studies aim to “portray an accurate profile of persons, events or situations” (Robson, 2002:59). This may be an extension of, or a forerunner to, a piece of exploratory research (Sauder Mark). It is necessary to have a clear picture of the phenomenon on which you wish to collect data prior to the collection of the data. Explanatory studies that establish causal relationships between variables may be termed explanatory studies (Sauder Mark). The emphasis here is on studying a situation or a problem in order to identify cause-and –effect relationships between variables.

After reading all the research purpose concepts, we decided to choose exploratory as our thesis’s purpose. Since we want to get better understanding on how interface design can
4.2 Research Approach

In this chapter, we are going to find the right ways to address the matter we focus on. There are two main research approaches to choose from when conducting research in social science: qualitative or quantitative method (Yin, 1994). The most important difference between the two approaches is how to use the numbers and statistics you get (Ibid). The choice of research approach naturally depends on the defined research problem and the data needed for solving this problem.

Qualitative focus on the research that will have a better understanding of the studied objects, they also aim to be relative flexible (Ibid). In addition, qualitative research is the search for knowledge that is supposed to investigate, interpret, and understand the problem phenomenon by the means of an inside perspective (Patel & Tebelius, 1987). The characteristics of qualitative studies are that they are based largely on the researcher’s own description, emotions, and reactions (Yin, 1994). The qualitative approach also includes a great closeness to the respondents or to the source that the data is being collected from (Holme & Solvang, 1995). To improve the quality of the data and reduce the subjectivity we will discuss the validity and reliability later.

Quantitative has a characteristic that tend to be more structured and formalized (Holme & Solvang, 1995). The research tries to explain phenomenon with numbers to obtain results, thereby basing the conclusions on data that can be quantified (Lundahl & Skärvad, 1992). This approach is considers especially useful when conducting a wide investigation that contains many units (Holme & Solvang, 1995). As we said above, this approach has highly subjectivity, so the researchers have to be objective for the data they get and have to make a generalization after the research even you can’t get same amount information from each unit.

After comparing two approaches of research approaches, we choose qualitative approach for our thesis. Because the goal of this thesis is to gain a deeper understanding of the relation between interface and trust building instead to make any generalizations. The aim of our thesis is to build a closer contact with our research objects, which intend to provide us, the researchers with a better understanding of the participants’ attitude, behaviours, and perceptions. At last as the purpose of this thesis is to explore and describe, we will find most detailed information as possible, so qualitative is our best choice.

4.3 Research Strategy
Methodology

There are three distinct conditions that will affect the choice of research strategy: the type of research questions asked, the extent of control an investigator has over actual behaviour events, and the degree of focus on contemporary events compared to behavioural events. According to Yin (1994, p5) there are five different strategies for the research, of course each one has both advantage and disadvantage. The five ones are an experiment, a survey, history, an analysis of archival records and a case study. These are shown in Table 9.

Table 9: Relevant Situations for Different Research Strategies

<table>
<thead>
<tr>
<th>Research Strategy</th>
<th>Form of Research Question</th>
<th>Require Control Over Behavioural systems</th>
<th>Focus 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>No</td>
</tr>
</tbody>
</table>

Source: Yin (1994), p6

According to Yin, when a “how” or “why” question is being asked about a contemporary set of events over which the investigator has little or no control. Yin (1994) also continues to explain that case studies are characterized by investigations of contemporary phenomenon within its real-life context, and that case studies should be used especially when boundaries between phenomenon and context are not clearly evident. Based on above explaining and our research questions, case study is the appropriate strategy for our thesis.

A case study also helps to explain and describe the causal links in real-life interventions (ibid). By conducting a case study we will gain a rich understanding of the context of the research. We do not intend to claim that our results, conclusions or theory can be generalized to all populations. The characteristics of our research questions will provide us with relatively many variables, which is a further reason for selecting the case study.

A case study could involve a single or multiple case studies. When two or more organizations are investigated, it is called a multiple case study, which gives the opportunity to compare studies in a cross-case analysis, so that a higher level of understanding can be reached (ibid). Yin (1994) further states that evidence from a multiple case study is often considered as more compelling that evidence from a single case study, and therefore the multiple case study is looked on as more robust.

Miles and Huberman (1994) explain how a multiple case study can make it possible to
specify how, where, and sometimes also why a certain phenomenon has a specific behaviour.

So following the above theory, we choose two websites, one is Chinese website and the other is in Swedish. We think multiple studies can add to validity, precision and the stability of the findings. This enables us to compare the results from each case in a cross-case analysis.

4.4 Data Collection

According to Yin (1994), there are six forms for collecting qualitative data. In the following table 10, you could see the six sources of evidence, together with their strengths and weakness.

<table>
<thead>
<tr>
<th>Source of evidence</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>• stable - repeated review</td>
<td>• retrievability - difficult</td>
</tr>
<tr>
<td></td>
<td>• unobtrusive - exist prior to case study</td>
<td>• biased selectivity</td>
</tr>
<tr>
<td></td>
<td>• exact - names etc.</td>
<td>• reporting bias - reflects author bias</td>
</tr>
<tr>
<td></td>
<td>• broad coverage - extended time span</td>
<td>• access - may be blocked</td>
</tr>
<tr>
<td></td>
<td>• retrievability - difficult</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• biased selectivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• reporting bias - reflects author bias</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• access - may be blocked</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• same as above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• precise and quantitative</td>
<td>• privacy might inhibit access</td>
</tr>
<tr>
<td>Archival Records</td>
<td>• targeted - focuses on case study topic</td>
<td>• bias due to poor questions</td>
</tr>
<tr>
<td></td>
<td>• insightful - provides perceived causal</td>
<td>• response bias</td>
</tr>
<tr>
<td></td>
<td>inferences</td>
<td>• incomplete recollection</td>
</tr>
<tr>
<td></td>
<td>• reflexivity - interviewer expresses</td>
<td>• reflexivity - interviewee expresses</td>
</tr>
<tr>
<td></td>
<td>what interviewer wants to hear</td>
<td>• observer’s presence might cause</td>
</tr>
<tr>
<td>Interviews</td>
<td>• targeted - focuses on case study topic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• insightful - provides perceived causal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inferences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• reflexivity - interviewee expresses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• observer’s presence might cause</td>
<td></td>
</tr>
<tr>
<td>Direct Observation</td>
<td>• reality - covers events in real time</td>
<td>• time-consuming</td>
</tr>
<tr>
<td></td>
<td>• contextual - covers event context</td>
<td>• selectivity - might miss facts</td>
</tr>
<tr>
<td></td>
<td>• reflexivity - observer’s presence might cause</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Six Sources of Evidence: Strengths and Weakness
Basing on our research question and above table, we think that interview is the most suitable way for our study. According to Yin (1994) the most significant source for obtaining case study information is interview. Because interview can have interactions between respondents and interviewer. Holme and Solvang (1995) interviews are ideal when in-depth information is preferred and that is allows flexibility and closeness to respondents, which is important when conducting qualitative studies.

There are two kinds of interviews: personal interviews and telephone interviews. As we know personal interviews have much advantage than telephone interviews. Because for the respondents, which could be face to face to the interviews, can feel more confident.

During the interviews, you could follow three different strategies: open-ended interviews, focused interview and a structured interview. In the open-ended interview, the respondents are asked for some opinion around our study. The focused interview is performed in a conversational manner but follows a set of questions coming from the case study protocol. The structured interview is best suited for surveys and this type of interview follows a structure questionnaire.

Considering our research questions, we choose open-ended interview. We need to know our respondents opinion and thoughts about our study.

Besides interview, we also would like to use observation together with interviewees on selected websites related to our thesis. Since according to Yin (1994), direct observation can involve observation of meetings, sidewalk activities, factory work, classrooms. To increase the reliability of observational evidence, a common procedure is to have more than a single observer making an observation, whether of the formal or casual variety.

### 4.5 Sample Selection
What ever your research question(s) and objectives you will need to collect data to answer them. If you collect and analyse data from every possible case or group member, this is a termed a census. However, for many research questions and objectives it will be impossible for you either to collect or to analyse all the data available to you owing to restrictions of time, money and often access.

Students are widely used for various kinds of academic research based on their accessibility and relative homogeneity regarding, for example, age, economic situation and lifestyle (Smith, Haugvedt, Jadrich & Anton, 1995). So when choosing the sample, the persons you choose have to feel like to talk each other, and wide gaps in social background and not in attitudes.

For our study, 10 participants were chosen for two case studies. Five of them are Swedish, the rest of them are Chinese. Five Chinese students are or were in the Master programme of E-Commerce in Luleå technical university. The reason why we chose them was because they are familiar with many concepts of internet, so they are the proper participants. For those five Swedish people, three of them are doing job with internet for almost ten years, the two of them use online-shopping very often. The reason we select sample from different culture is to get variety data for increasing data reliability.

We had the face-to-face interview one by one with our interview guide and questionnaire which was just show some background information about the 10 participants. Each interview took around 70-90 minutes. First we showed them the websites to them which were first time for them to visit. The reason why we chose the strange websites was then we could test about the relationship between interfaces design and initial trust. Second step we let them to fill in the questionnaire and the last step we began our interview with the interview guide.

### 4.6 Data Analysis

Data analysis include examining, categorizing, tabulating or otherwise the collected data. According to Yin (1989), every case study should begin with a general analytic strategy. These general analytical strategies, with regards to the cases studied, provide the researcher with a system by which priorities can be set for what needs to be analyzed and why. (Ibid) The data analysis consists three synchronized activity:

- Data reduction is made in order to make the data sharp, focused, sorted, discarded and organized so that the researchers can draw and verify conclusions. A within case analysis is often used at this phase, which involves a comparing the collected data with the theories used (Ibid).
- Data display is the second major activity, in which the researcher takes the reduced data and displays it in an organized and compressed way in order to make it easier to
draw conclusions. (Miles & Huberman, 1994) Yin (1994) stated that this phase is useful when multiple case studies are being studied. Multiple cases can be compared in a cross-case analysis. Where data in one case is compared to data in another case (Miles & Huberman, 1994).

Conclusion drawing and verification is the final analytical activity in qualitative research. It is here the researchers begins to decide what things mean by noting regularities, patterns, explanations, possible configurations, causal flows, and propositions (Ibid).

When analysing our data, for ours research questions, we will make a data comparison through a with-case analysis, which could make it possible to reduce the amount of the data. Cross-analysis will be conducted in order to compare the different groups as well as display similarities and difference. The entire conclusion for this study will be drawn from the data of with-case and cross-case study.

4.7 Validity and Reliability

For the data collecting from your interview, we have to determine the validity and reliability of them. Validity and reliability are the most important and commonly used the criteria used for evaluating the quality or credibility of research. According to Yin (1994), four specific tests methods can be conducted in order to judge the quality of empirical research:

- Internal validity- establishes a causal relationship in which certain conditions are shown to lead to other conditions, as distinguished from fake relationships.
- External validity- establishes the domain to which a study’s findings can be generalized.
- Construct validity- establishes a correct operational measure for the concepts being studied.
- Reliability- demonstrating that the procedures of a study such as the data collection can be repeated by others with the same results.

According to Yin (1994), these tests and thereby the quality of the study can be enhanced through the use of a number of tactics when doing case study research. The tactics are shown in table 11.

Table 11: Tactics Used in Case Study

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case Study Tactics</th>
<th>Phase of Research in Which Tactics Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Validity</td>
<td>Use of multiple sources evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Establish chain of evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Have key informants review draft case study</td>
<td>composition</td>
</tr>
<tr>
<td></td>
<td>repost</td>
<td></td>
</tr>
</tbody>
</table>
Methodology

<table>
<thead>
<tr>
<th>Internal Validity</th>
<th>Do pattern matching</th>
<th>Do explanation building</th>
<th>Do time-series analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Validity</td>
<td>Use replication logic in multiple-case studies</td>
<td>Research design</td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>Use case study protocol</td>
<td>Data collection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop case study database.</td>
<td>Data collection</td>
<td></td>
</tr>
</tbody>
</table>

Source: Yin (1994)

4.7.1 Validity

There is three different tactics for increasing construct validity: using multiple sources of evidence, establishing a chain of evidence, and having key informants review a draft of the case study report (Ibid). So in our study we consider the construct validity through asking an outsider well known with the complex of problems about her/his opinions. Together we will discuss the research area and how we intend to collect data.

As we chose interviews as the way we collect data, which made to increase the validity in our thesis. All the participants in our interview are very familiar with the study area of our thesis, and our face-to-face interviews also increase the validity of our data.

The same interview guide will be used in all our interviews. The data we collected will also be organized into separate sections where each of the people will be presented. Furthermore we use the same language-English as our interview language.

4.7.2 Reliability

According to Yin (1994), reliability demonstrates that the operations of a study, such as the data collection procedures, can be repeated with the same results. Two things can increase reliability: the use of a case study protocol and the development of a case study database (Ibid). The common procedure for increasing the reliability is to have more than a single observer making an observation, whether it is of the formal or the causal variety.

To increase the reliability of this thesis, we will use notebook during the interviews. We will write down what ever the respondents saying without our subjective opinions. We also use record pen as our tool, to minimize the misunderstanding and the risk of letting out something vital. But there is still one thing that cannot be avoided and could affect the reliability was personal chemistry and personal interaction.
Chapter Five
Data Collection

In this chapter we will present the empirical data we collected through 2 cases studies. According chapter 4 we have mentioned, we choose 2 unfamiliar online bookshop websites for interviewees. One is Sweden Bookshop (www.swedenbookshop.com) for Swedish respondents, the other is Times bookshop (www.gdbook.com) for Chinese respondents. Here we will present the each case one by one, firstly we will give the online bookshop introduction, and then we will present the data collected. It will follow the same order as our research questions are posed, conceptualized and literature is reviewed.

5.1 Case One (Sweden)

5.1.1 Sweden Bookshop — www.swedenbookshop.com
Sweden Bookshop is an e-bookstore as well as a physical one. It specializes in supplying a broad selection of information about Sweden and Swedish literature in some 30 languages (mostly languages other than Swedish). Sweden Bookshop sells all of Swedish institute’s own publications as well as books from other publishing houses in Sweden and abroad. Here customers will find Swedish fiction and children's books in translation, as well as coffee table books, non-fiction, Swedish language courses and video cassettes.

5.1.2 Website (observation)
5.1.2.1 Branding

*Appeal,* this website doesn’t have any multimedia and animation elements, such as graphics that are twinkling and moving. There are only few pictures in the whole website. It uses the only one simple sky-blue as the page background colors. Two kinds of contrast colors are used in body text, black and blue, blue is used in hinting to hyperlink. It gives the physical store introduction, as well as it has a domain name consistent with the company name.

*Professionalism,* this website design is based on customer-centredness. It has the minimum viewing area, users don’t need scroll too much for accessing the whole information. It also mentions the company policies about cookies used and security issues.

5.1.2.2 Usability

*Organization,* this site uses the hybrid topology and implementation organization. In its homepage, there is also a link to guide how to buy a book from online bookshop.
**Navigation**, this site uses combined approaches to navigation, vertical navbars, horizontal navbars, and embedded links. The homepage can’t link to all the pages of the site, but it offers most of important information link. The horizontal navbars is always in visible. The site map is not provided in the site.

**Relevance**, this site doesn’t have too much information that is related with the users, even local Swedish users. There’s no local time, date, currencies available.

**Reliability**, It declares Sweden Bookshop is a part of the Swedish Institute (SI); it has a hyperlink to official gateway to Sweden. Each page downloading time is about 4-5 s. The company phone number, fax number and physical store location address are all mentioned in the site. There is no any error page during the order process and accessing information process.

**Consistency**, The site uses the standard design style as possible, such as Sign in, Search engine. Each page uses blue-sky as the background and gray text as the body text. It keeps the consistency in the body text tone and background color tone. The site also uses the consistency navigation in each page.

**Learnability**, the site is designed in very simplicity style. In the order procedure and accessing information procedure, there is no any too special and novelty operation required. Each of described information is not prolixity.

**User guidance or support**, the site provides Help link in the homepage, every buying details you can find in the Help category, it also provides the service email address for those users who need to know further information.

### 5.1.3 Swedish Respondents

The first topic we discussed is if the user interface design has the positive effect on initial trust, all of respondents referred there is strong relationship between user interface and initial trust, good first impression causes initial trust about company, and initial trust incites users to further explore this site.

Secondly we discuss how interface properties influence the initial trust about company

#### 5.1.3.1 Branding

Regarding appeal, most of Swedish respondents have the positive impression about the website. They think this website has the simplicity design style and the advantage of using simplicity style is minimal the each page downloading time. The purpose of this site is very clear from start. The tone used in text and color is appropriate. Only one respondents referred this website looks not like bookshop, there is no any distinctness symbol shows this is bookstore. In particular, two respondents mentioned it is good way to build initial trust that the site gives physical store introduction and makes the domain name consistent with the company name.
Regarding **Professionalism**, all of respondents agreed this site provide clear assignment of responsibilities, upfront disclosure of terms & conditions, like shipping costs, return issues e.g. 3 respondents also referred the site gave the privacy policy, it is important factor influencing their trust about this company. Three responds said the graphic design of this site is professional, they designed the small pixels pictures (100×150 pixels) in the pages. 4 respondents thought the company pays attention to interface design details, like graphic, textual and navigational.

When we asked them if the homepage incites users to explore the site further, most of respondents said it depends on whether they need buy the book or not. If they just access this site by accident, without buying purpose, they will just stop in the homepage.

Five respondents all consider branding factors, *appeal* and *Professionalism* could bring them instinctive trust, even without any further explore. When they are in buying decision process, this trustworthiness will stimulate them to explore the site further.

### 5.1.3.2 Usability

Regarding **Organization**, all of participants thought the website is structured logically they said this structured is easy to represent where the user is in a hierarchy. The site also provides strong cues about what are you doing, you will not be in confusing situation. Though there are no classification schemes in homepage, it is still accepted by users the classification schemes with professional terminology appear in the search page.

Regarding **Navigation**, the participants felt there is not too complicated navigation, it is easy to find any relevant information. And the navigation across the different sections is consistent, it is good way for users getting familiar with this website in a short time. The participants also suggested it is better to give the site map in homepage, it will help the first user learn the whole site quickly.

Regarding **Relevance**, all the Swedish interviewees said they couldn’t find any relevant local information in this website, but most of them insisted it is not important factor affecting their initial trust. Only one participant said relevant information maybe makes him feel closer with the company. Moreover, about customization, one participant suggested, when he sign in his account, he would like his name appear in the welcome window. First benefit is he could know he reached his own account, he can do any transaction in the right account, and second benefit is it can make a friendly shopping ambience.

About system **Reliability**, all the participants are satisfied the page download time, according to test, each page download time is about 4-5 s, it meets up users expectation, this site doesn’t contain the broken hyperlinks. The participants also referred, since this site is a partner of the official gateway to Sweden, it makes this site more reliability.
About **consistency**, when we discussed text and color tone, and navigation, all the participants gave the same opinion, each page should keep consistency in text, color, and navigation. But when the standard design style is brought up, the participants’ views are different, 3 participants preferred the site has the similarity interaction design as some well known sites, it make them more easily to handle the ordering and buying process. 2 participants said they don’t care whether this site has the similarity or new design, if they feel it is easy to learn, they would like to accept new things. In this case they said the site followed the standard interaction design, the checkout and ordering process is intuitive.

Regarding **Learnability**, the interviewees agreed a well-designed interface should be easy to learn. 2 participants said, even some website with the good reputation in physical store, if it design the complicated interface, it will destroy the initial trust, and users will not be interested in doing any transaction anymore. It this case, the participants felt, this site pay attention to achieve this point through the use of simple and clear language, meaningful display and logical grouping.

About **User guidance or support**, all the participants referred good user guidance scheme will improve learnability and decrease the mental workload. They preferred they can find any useful information in help category, don’t like sending email or call to the service department to get information. They said there are great details in the help category in this site. Though they don’t like send email or make call, they all agreed the site should provide the email address and call number, just in case.

Through the discussing each of usability factor, the respondents consider the impact of the organization, navigation, reliability, consistency, learnability, user guidance or support factor on the initial trust is very important, only relevance is least factor influencing their initial trust.

### 5.1.3.3 Trust build

When determination of trust questions are brought up, interviewees have the positive attitude about swedenbookshop.com, they expressed they would like to explore this site further; they liked the site’s values; they felt confident about the site’s goodwill and competent skills; this site is very well qualified and capable of performing the things it tries to do; they never wondered whether this site stick to its words.

### 5.2 Case Two (China)

#### 5.2.1 TianLin Bookshop — www.gdbook.com

TianLin online Bookshop approved by Guangdong Press and Publication Administration, it is a retailer of books as well as a wholesaler. Using the internet as its primary medium and a nationwide distribution channel as its logistics backbone, TianLin bookshop is trying to become one of the most widely know online bookstore in China. The company strives to offer its customers compelling value through its broad selection, high-quality...
content, a high level of customer service, competitive pricing and personalized services.

5.2.2 Website (observation)

5.2.2.1 Branding

Appeal, this website contains animation elements, such as graphics that are twinkling and moving. There are lots of pictures in the homepage. It uses the various of colors in the pages. Body text is designed in black and red, red color is used in for headline. In the homepage, both of colors body text probably link to the sub pages. The company logo is situated top the left homepage. The website’s domain name is not consistent with the company name. Graphics and layouts seems a little cluttered and misaligned.

Professionalism, in this site, the page-width exceed the screen width, users have to use the scroll bar to see content below the page. It doesn’t declare the company privacy policies and security issues. The company doesn’t pay much attention in the design detail, such as the body text size is not consistent, some hyperlink is designed in embedded body text, and some is designed in icon.

5.2.2.2 Usability

Organization, hybrid topology is applied in this site. It provides online buying demonstration. The site is organized deeper than 3 levels, broader than about 16 options.

Navigation, this site designed combined approaches to navigation, vertical navbars, horizontal navbars, and embedded links. The horizontal navbars is always in visible. The navbar doesn’t indicate where the user is currently located. There is too much navigation in the homepage. The users can not quickly review all options without scrolling or rolling over the options. The site map is not provided in the site.

Relevance, this site doesn’t provide local information, such as time, date, and currencies. When users sign in account, user’s name will be displayed in the page. About customization, customer can select different package according to their wish, the site provides different wrapping papers.

Reliability, Each page downloading time is longer than 4-5 s. The company phone number, fax number, physical company address are mentioned in the site. There is no any error page and system crash during the order process and accessing information process.

Consistency, The site applies standard procedures as similar website as possible. It keeps consistency in use of text, but use of color. Navigation is designed in consistency in different page.

Learnability, the site is designed in too complex style. There are too many alternatives available for users. In the order procedure and accessing information procedure, there is no any too special and novelty operation required. Each of described information is not prolixity.
User guidance or support, the site provides Help link in the homepage, every buying details you can find in the Help category, it also provides the service email address for those users who need to know further information. In particular, there is online guest question forum, customer can ask questions online and get reply from company online. Moreover customers can read other customer’s questions and replies in this section.

5.2.3 Chinese Respondents

Same as first case, the first topic we discussed is if the user interface design has the positive effect on initial trust, all of respondents agreed there is strong relationship between user interface and initial trust, good first impression causes initial trust about company, and initial trust incites users to further explore this site.

Secondly we discuss how interface properties influence the initial trust about company

5.2.3.1 Branding

When it turns to appeal problem, respondents are commonly disappointed with the design of this webpage. First, it looks roughly designed without any clear orderliness. Five of respondents said that it’s a little bit difficult for them to find what they want through such a homepage. It seems that the designer tries to put all information such new book details, hot books details, keywords search details, advertisement links, discount details and company introduction into one homepage. However, this pattern of designing does not actually have a positive appeal for its visitors. Four respondents said it makes them very confused that the site uses both of colors text linked to sub page. All of them also mentioned it is not easy for them remember this domain name, since the domain name is not consistency with the company name. Three of my respondents even said directly that they don’t want visit it again in future because it waste their time to browse such an unorderly designed website.

Turing to professionalism, just two respondents thought the design of this home page is ok. Most respondents didn’t think it’s a professionally designed. Basically, visitors won’t have a deep impression of this online bookstore. It tries to use many kinds of colours in the different content title to attract visitors, it only make visitors think that they are watching a painting, but in fact, what visitors want to do is finding information they need. Else, it contains about over two hundred links in the first homepage. The visual area exceeds much than the screen size, users have to use scrolling bar to find information in the bottom. Most respondents said that they don’t have time and energy to visit it and find information in such a homepage. Moreover, another important point the respondents mentioned is this site doesn’t give the company privacy policy and security issues, definitely it will destroy their initial trust toward this site.

Regarding to appeal and professionalism are both not very outstanding compared to other websites. Respondents think that it’s difficult to build trustworthiness between this interface and its visitors.
5.2.3.2 Usability

Regarding **Organization**, all of participants thought the website is not structured logically. It is easy for visitors get confused when they are browsing because there are too many links that they sometimes don’t even know where they are. There are too many classification schemes without professional terminology in homepage, users wondered which classification category they should click when they were looking book information.

Regarding **Navigation**, it seems a mess. All participants thought that it is the most serious problem if this homepage. It provides tens of ways for visitors to get the same destination. Obviously, it is confusing. What visitors want to do is to find the information they need in a short time easily. The links are paths for visitors to follow, it’s should definitely be clear. As well as, the site map is not provided in the homepage. Participants thought that if this problem can be solved, the situation can be much better.

Regarding **Relevance**, all the Chinese interviewees said they are generally satisfied with the design of relevance. They can get related information they want. Furthermore, you can find more related contents than you expect. They think this also what the designer tried to do in the designing process of this webpage. Mass information is an obvious trait of this homepage. It’s convenient to those visitors trying to find related information. However, to most other visitors, it seems don’t help a lot. In addition, two of respondents preferred their name appears in the page when they sign in the account. Others didn’t care this feature. About customization, most of respondents were satisfied with a broad selection on package.

About system **Reliability**, all the participants were not very satisfied with the time of page downloading; most of them thought it’s slow to download the page completely. Usually, they have to wait roughly 20 seconds to see the completely opened homepage and linked webpage. Although this site doesn’t contain the broken hyperlinks, it’s also not as reliable as interviewers expect.

About **consistency**, all participants agreed that the consistency of this webpage design is fine. It uses the color of as its basic tone in every of its pages. Maybe it’s related to its name-Tianlin bookstore which translated as sky and forest. Standard procedures are also designed in the whole process, and the navigation across the different sections is consistent. Two of our participants thought that it’s a very important factor whether the WebPages have consistency because it makes visitors have a general feeling about this interface. Finally, it will stimulate the visitors’ trustworthiness about the interface.

Regarding **Learnability**, it seems another problem of this website. Almost all respondents thought that this webpage doesn’t provide a good learnability. Since site is designed in too complex style, and too many alternatives available for users, it confused the users
which approach they should select. Even in the order procedure and accessing information procedure, there is no any too special and novelty operation required, most of respondents insisted it is not easy to learn. The respondents thought it’s the most important factor of whether this website can live for a long time. They thought learnability can really show what it can provide for its visitors.

About User guidance or support, our respondents also find there are buying process guidance and online support in this website. Four of respondents thought this is better useful because it can give instructions to customers who are not very clear of how to operate. They all agreed the online question forum is good way to guide the users and solve the different customer’s questions. One respondent also referred that this user guidance or support should also focus on professional view part but not just buying process part. It could be better if this website gives visitors more recommendation on how to select book and read book more scientifically. By doing this, it can help construct stable relationship between website and its visitors. Undoubtedly, it will stimulate initial trust of visitors.

5.2.3.3 Trust Build
About final attitude toward this site, most of interviewees have the negative impression, basically they don’t have confidence about this site’s goodwill and competence skill, they thought this site hasn’t much knowledge about the work that needs done, their needs and desires seems not very important to this site, they have wondered whether this site will stick to its words.
Chapter Six

Data Analysis

In the previous chapter, we have presented the data collected from two cases. In this chapter we will analysis the collected data on the basis of frame of reference of this thesis. The within-case analysis and the crossed-case analysis will be applied for analyzing the collected data.

6.1 Within-Case Analysis-www.swedenbookshop.com

6.1.1 Branding

In Egger (2003) research, he pointed “As far as branding is concerned, care must be taken to transpose offline brand attributes of a trusted brand to the online system. This not only includes logotypes, corporate colors, fonts and style guides, but also communication style. This helps transfer familiarity of the online company to the online extension.” To integrate the offline brand into online interface, Swedenbookshop.com used domain name consistent with the physical company name; provide the physical store introduction link in the homepage.

As well as Fogg et al(2001) revealed “Competence-related trust can be facilitated by a professional appearance of the website, both in term of graphic design and writing style.” Regarding this point, swedenbookshop.com obviously pays attention to details in graphic, textual and navigation design. The tone used in text and color is appropriate; the graphic is designed in appropriate size which doesn’t affect the page download speed. The whole site is designed in simplicity style to minimal the each page downloading time, without using animation or multimedia elements to increase the appealing because it is not necessary. The site also keeps comfortable viewing area, users don’t need scroll too much for accessing the whole information.

The online business should be clearly identifiable, be it by a logo or a slogan. A clear statement of what the site is about should also be present, along with the company’s key selling points. (Egger, 2003) The purpose of swedenbookshop.com is very clear from start; it also provides clear assignment of responsibilities, upfront disclosure of terms & conditions, like shipping costs, return issues e.g.

In Fogg et al. (2002) report, finding indicate that looking good is often interpreted as being good - and credible. According to the Swedish respondents’ answer, when they are in demand situation, two factors of branding, appeal and Professionalism could bring them instinctive trust, this trustworthiness will stimulate them to explore the site further.

6.1.2 Usability

About organizational, Egger (2003) noted that structure the site in accordance with customers’ domain model and expectations is one of trust design guidelines.
Swedenbookshop.com is structured logically, that it is in accordance with the customers' mental model of the domain. Customers can access each of hierarchy easily without any confusing. Strong cues are provided to indicate what are you doing and where are you.

Regarding **navigation**, Egger (2003) stated that the site’s ease-of-use, in particular, the ease of finding relevant information (minimal click stream) will be greater efficiency and satisfaction. There is not too complicated navigation in swedenbookshop.com, it is easy to find any relevant information. To make browsing continues, it carefully labeled links on their website and make sure each of them can target relevant subpage. Customers can easily follow the instruction on the site to implement their demand. And the navigation across the different sections is consistent, it is good way for users getting familiar with this website in a short time. Moreover it only gives one option to get book information, it is simple with efficiency and easy to learn. However there is not site map available in this site, according to respondents’ answer, if the site with a clear menu and relevant information, the users are not actually interested in where they are within a site as long as the links are clear.

About **relevance**, according to Egger (2003), the degree to which consumers feel that the website is relevant to them also has an influence on their willingness to explore the site further. So present information in a way relevant to the customer: e.g. thoroughly test localized systems; learn and anticipate customers’ preferences: e.g. personalization over time. Swedenbookshop.com doesn’t provide any local relevant information, regarding this point, the interviewee’s view seems argument with Egger opinion, they insisted they were not interested in relevant contents, it is not important factor influencing the site trustworthiness. About personalization, the participants gave the comments, they preferred their name appear in the window after they sign in, it meets Egger’s view in a certain extent.

An important factor in system **reliability** category is a page’s download time, stated by Egger (2003). User expectations were 8s in a 1999 study and down to 4s over any kind of connection in 2000 (Nelson, 2000). The interviewees satisfied the page download time of swedenbookshop.com. 4-5s download time meets users’ expectation. There is significant correlation between the website download speed and user’s initial trust toward the unfamiliar site. There’s also no any system crash, error page in this site, all of this contribute the site’s trustworthiness.

Lin and al. (1997) noted that **consistency** is recognized to be able to improve user performance and user satisfaction. It applies internally to the web site and externally to other websites through standards and conventions. All of interviewee agreed a trustworthy site should keep consistency in text, color, and navigation in each section. But about standards and conventions, 2 respondents gave the unexpected the opinion, similarity interaction design as some well known sites is not important criterion for judgment trustworthiness, sometimes they would like to accept new design style, it depends on the learnability of the new design.
“A well-designed interface should be easy to learn. This is achieved through the use of simple and clear language, meaningful display and logical grouping” stated by Lin and al. (1997) Swedenbookshop.com increase the site learnability by using of simple and clear language, meaningful display and logical grouping. The respondents gave the same view, only an easy to learn website can attract them to access in future, a lack learnability website is also lack trustworthiness, it will not survive for a long time.

Lin and al. (1997) pointed a good user guidance scheme will improve learnability and decrease the mental workload. The respondents answer is in accordance with this view, swedenbookshop.com provide the important details in help categories, it is easy for customers to learn about the procedures required to transactions, thus a good user guidance will boost the user’s initial trust.

6.1.3 Trust Build
Kim (1997) introduced, "should provide a pleasant shopping environment" (p. 12). Indeed, it is crucial that e-commerce interfaces should attract consumers, thereby converting them into potential customers. Indeed, if consumers do not feel attracted by an online shop's interface, they will simply switch to other online vendors.

Regarding results from Swedish respondents, they expressed they would like to explore this site further; they liked the site’s values; they felt confident about the site’s goodwill and competent skills; this site is very well qualified and capable of performing the things it tries to do; they never wondered whether this site stick to its words. Finally they thought this site is successful at building initial trust through interface design. From this result, we can say an effective user interface design can gain the customers’ trust in the first contact.

6.2 Within-Case Analysis-www.gdbook.com
6.2.1 Branding
Appeal refers to first overall impression one gets when accessing a site for the first time. Egger (2003) state that branding refers to a site’s visual design. Design is crucial as it can make a strong first impression when accessing a site for the first time. One of branding element is appeal which has largely to do with the site’s graphic design and layout. About this point, gbbook.com disappointed customers, unnecessary animation elements slow down the speed of page download, cluttered and misaligned design style make first users confused. Designer tries to put all information including such new book details, hot books details, keywords search details, advertisements links, discount details and company introduction into one homepage. However, this pattern of designing is not accepted by customers, most of time customers are not interested in irrelevant topic, on contrast customers feel difficult to find information they want indeed. Moreover both of
colors text linked to sub page, this kind of design is not accordance with customers’
pre-knowledge. In addition, less memorable is another shortcoming, since there is no
distinguish appearance from other competitors, domain name is not consist with company
name.

**Professionalism** refers to “Customer-centredness, as well as attention to detail, can help
the site convey a professional image. A company’s investment in setting up a
professional- looking site can be perceived as a sign of a financially viable business with
a reputation to defend” noted by Egger (2003) Too many graphics, hundreds of
hyperlinks provide in homepage, the visual area exceed screen size, privacy police and
security issues are not mentioned in the site. All of these show gdbook.com interface is
not designed around customer-centredness, this site seems not pay attention to deal some
details. Interviewees complained they didn’t have time and energy to visit it and find
information in such a homepage, this site is not concerned about their welfare.

As Lindgaard (1999) noted, “an immediate negative impression may well determine our
subsequent perception of the site’s quality and usability.” This site user interface design
doesn’t meet customer’s expectation, this negative first impression destroy the initial trust
toward this site.

### 6.2.2 Usability

About *organizational*, the site is organized deeper than 3 levels, broader than about 16
options. It is easy for visitors get confused when they are browsing because there are too
many layers and links that they sometimes don’t even know where they are. Based on
Kim (1997) research, organizational refers to the extent to which the site's commercial
offerings and resources are made explicit by organizing its content in a manner relevant
to the end user. Familiarity in terms of domain knowledge, classification schemes are
necessary elements for a trustworthiness website, it is obviously this site structure design
didn’t satisfied customer’s expectation.

About *navigation*, Lin et al. (1997) mentioned easy of navigation refers to ease of finding
what you want and knowing where you are in the Web site. The mess navigation is
provided by gdbook.com. It provides tens of ways for visitors to get the same destination.
This is too complicated way without efficiency for customers to learn unfamiliar website
in a short time. Without clear menu and relevant information, in such a jumbled situation,
respondents suggested the map is necessary to be provided, however there is no site map
available. Regarding respondent view the navigation design of this site fails, it is not
successful at the things it tries to do.

About *relevant*, gdbook.com generally satisfied the customer’s expectation. The
customer’s name appear in the window after sign in, customizing package paper design
according individual favorite, well-wishing is given during Chinese new year. But they
all thought relevance doesn’t have strong impact on their initial trust, sometimes they just
prefer, even there is no any relevant information, if they feel this site is very capable for performing its job, they would like to explore further. This opinion is argument with Egger (2003) theory that is the degree to which consumers feel that the website is relevant to them also has an influence on their willingness to explore the site further.

About system **reliability**, although this site doesn’t contain the broken hyperlinks, it’s also not as reliable as interviewers expect, since the slow download speed is direct barrier to acceptance new website, customer will not waste time to access an unfamiliar website. According to Nelson (2000) user expectations were 8s in a 1999 study and down to 4s over any kind of connection in 2000, 20s is obviously not satisfied customer’s requirement about new technology. This site will lose customers trust when they are accessing this site first time, even they don’t know what this site looks like.

About **consistency**, gdbook.com is qualified at this point. Color, text, navigation is consistent across the different page. Standard procedure is designed as some well know sites. According to respondents’ feedback, this general consistent feeling bring customer’s strong sense of justice of this site as Lin and al. (1997) noted that consistency is recognized to be able to improve user performance and user satisfaction.

About **learnability**, another problem for this website, too complex style, and too many alternatives available for users, it confused the users which approach they should select. Even standard procedure is embedded in transaction process, but information customer concerned is still difficult to get. Egger (2003) revealed interface design should support the browsing behaviors of both novice and expert users. For novice users this site is lack learnability, especially when they first time to access this site, they will blame the designer bring them so much inconvenience, consequently they will lose confidence about this site.

About **user guidance or support**, as Egger (2003) noted informing customers about the procedures required to transact: e.g. overview of steps is one of guidelines of design trustworthiness website, buying process demonstration, online question forum are provided by this site. Respondents all agreed the online question forum is good way to guide the users and offer the chance for customer to read different questions. In particular, respondents suggested a new idea in the guidance category that is user guidance or support should also focus on professional view part but not just transaction process part, they thought it will stimulate their initial trust toward website.

### 6.2.3 Trust Build

Regarding Chinese interviewees’ response, basically they don’t have confidence about this site’s goodwill and competence skill, they thought this site hasn’t much knowledge about the work that needs done, their needs and desires seems not very important to this site, they have wondered whether this site will stick to its words. As Berger and Sasse (2001) stated that most interface elements can be seen as trust qualifiers: they are unlikely
to get non-shoppers over the 'trial-threshold'. If not taken care of, however, they have a great potential for destroying trust.

6.3 Cross-Case Analysis

6.3.1 Branding

Table 12: Factor of appeal in the two cases

<table>
<thead>
<tr>
<th>Content of Appeal</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphics and Layout</td>
<td>Simplicity and meaningful</td>
<td>Build trust</td>
<td>Cluttered and misaligned</td>
<td>Destroy trust</td>
</tr>
<tr>
<td>Identifiable</td>
<td>Distinguish feature, domain name is consistent with company name</td>
<td>Build trust</td>
<td>Common feature, domain name is not consistent with company name</td>
<td>Destroy trust</td>
</tr>
<tr>
<td>Familiarity</td>
<td>transpose offline brand to online system,</td>
<td>Build trust</td>
<td>No own offline brand and no any recruiting familiarity brand</td>
<td>No help to increase trust</td>
</tr>
</tbody>
</table>

Source: Authors' own source

Table above show, we can see swedenbookshop.com design website appeal successfully compare to gdbook.com, good first impression exert a subtle influence on initial trust. Clear graphics and layout design is a basic requirement, about familiarity, if a company does not have an offline presence, one can recruit brand attributes from familiar and related trusted companies, so as to constitute an initial trust capital by similitude as Egger (2003) noted. What distinguishes the company from its competitors is also one of important criterion.

Table 13: Factor of Professionalism in the two cases

<table>
<thead>
<tr>
<th>Content of professionalism</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer-centredness</td>
<td>comfortable viewing area; no any necessary animation elements,</td>
<td>Build trust</td>
<td>Viewing area exceed screen much, animation elements influencing download speed, hundreds of links in homage</td>
<td>Destroy trust</td>
</tr>
</tbody>
</table>
As table 13 shows, for most of Internet users, the degree of site design professionalism is the important factor when deciding whether to shop with an online-vendor or not. By complying with customer-centredness design features, pay attention to details, clear assignment of responsibilities, upfront disclosure of terms & conditions, an on-line retailer can signal professionalism and thus appear trustworthy.

6.3.2 Usability

Table 14: factor of organizational in the two cases

<table>
<thead>
<tr>
<th>Content of organizational</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>structured logically, in accordance with the customers’ mental model</td>
<td>Build trust</td>
<td>deeper than 3 levels, broader than about 16 options.</td>
<td>Destroy trust</td>
</tr>
<tr>
<td>classification schemes</td>
<td>No unnecessary classification schemes in homepage, it is provided in search page.</td>
<td>Build trust</td>
<td>Too many classification schemes without clear terminology in homepage</td>
<td>Destroy trust</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

Swedenbookshop.com try to limit information provided in homepage, reduce unnecessary classification as possible, on contrast gdbook.com seems to put all information in homepage, give the customer more than 10 options to reach the same destination, deeper than 3 levels in hierarchy design, according to customer’s response they would like to accept swedenbookshop.com organizational style. Customers will not spend limited time on studying an intricate organizational design website, involuntary they will lose confidence about this site.
Table 15: factor of navigation in the two cases

<table>
<thead>
<tr>
<th>Content of navigation</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
<td>Intelligible, easy to get information efficiently</td>
<td>Build trust</td>
<td>Confused, get information inefficiently</td>
<td>Destroy trust</td>
</tr>
<tr>
<td>Consistent</td>
<td>Consistent cross different section</td>
<td>Build trust</td>
<td>Consistent cross different section</td>
<td>Build trust</td>
</tr>
<tr>
<td>Site map</td>
<td>Not provided</td>
<td>Not necessary</td>
<td>Not provided</td>
<td>Necessary</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

As table 15 show, swedenbookshop.com satisfies the customers’ expectation to build trust through the ease of use navigation, get information efficiently (minimal click stream). Efficiency navigation is most important factor for first-user. As well as consistent navigation can help first-time visitors familiarize themselves with the system. As for site map, based on customers’ view, it depends on different situation, if clear menu, relevant information is revealed in homepage, users are not interested in site map, but when the homepage couldn’t give first-users a clear impression, the site map is necessary to be provided to help customers get familiar with the site quickly.

Table 16: factor of relevance in the two cases

<table>
<thead>
<tr>
<th>Content of relevance</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>localization issues &amp; relevant information</td>
<td>No</td>
<td>Don’t concern</td>
<td>Provided, like well-wishing in new year</td>
<td>only few is related with self, it doesn’t help lot</td>
</tr>
<tr>
<td>customization &amp; personalization</td>
<td>No</td>
<td>Prefer customers’ name appear in the window</td>
<td>a selection of book package page, customers’ name appear in the window</td>
<td>Prefer, build trust</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

Even swedenbookshop.com doesn’t provide any localization relevance information, but it seems not to influence customer’s initial trust, most of respondents don’t care about this. Gdbook.com offer mass relevant information, but customers don’t have a strong positive feeling about this, sometimes they think actually only few is related by themselves, it
doesn’t help lot. This result seems to be argument with Egger (2003) opinion, “the degree
to which consumers feel that the website is relevant to them also has an influence on their
willingness to explore the site further. In addition to localization issues, such as language,
date, time, currencies and other measurement units.” As for customization and
personalization, they prefer their name appear in the window after sign in.

Table 17: factor of reliability in the two cases

<table>
<thead>
<tr>
<th>Content of reliability</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed of download</td>
<td>4s</td>
<td>Satisfied, build trust</td>
<td>20s</td>
<td>Disappointed, Destroy trust</td>
</tr>
<tr>
<td>Error link</td>
<td>No</td>
<td>Enhance trust</td>
<td>No</td>
<td>Enhance trust</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

Speed of download page is the most important criterion for judging system reliability,
reliability site gain the customers’ trust easily, though gdbook.com doesn’t contain any
error links, customers still wondering its reliability since the 20 s download time is too
long, it is a threat for gaining trust.

Table 18: factor of consistency in the two cases

<table>
<thead>
<tr>
<th>Content of consistency</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Color, text, navigation is consistent across the different page.</td>
<td>enhance trust</td>
<td>Color, text, navigation is consistent across the different page.</td>
<td>enhance trust</td>
</tr>
<tr>
<td>External</td>
<td>standards and conventions</td>
<td>Accept new design if it is easy to learn</td>
<td>standards and conventions</td>
<td>Prefer standard design as the well know website</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

There is no doubt, keeping internal insistency is recognized to be able to improve user
performance and user satisfaction, like color, text, navigation consistent across different
section. About external, some customers think it depends on different situation, they
would like to accept a new procedure design if it is easy intelligible.
Table 19: factor of learnability in the two cases

<table>
<thead>
<tr>
<th>Content of learnability</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to learn</td>
<td>High learnability by using of simple and clear language, meaningful display and logical grouping</td>
<td>Build trust</td>
<td>Low learnability, too complex style, and too many alternatives available for users,</td>
<td>Destroy trust</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

As Lin et al. (1997) noted “A well-designed interface should be easy to learn.” only an easy to learn website can attract customers to explore in future. It stands to reason that a lack learnability website is also lack trustworthiness, it will not survive for a long time.

Table 20: Factor of guidance and support in the two cases

<table>
<thead>
<tr>
<th>Content of guidance &amp; support</th>
<th>Swedenbookshop.com</th>
<th>Customer response</th>
<th>Gdbook.com</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>Great details in help category</td>
<td>Build trust</td>
<td>Help category, online forum</td>
<td>Build trust</td>
</tr>
<tr>
<td>Demo</td>
<td>No</td>
<td>Don’t concern</td>
<td>provided</td>
<td>Build trust</td>
</tr>
</tbody>
</table>

Source: Authors’ own source

As Lin and al. (1997) pointed a good user guidance scheme will improve learnability and decrease the mental workload, thus a high learnability website will boost the user’s initial trust.

6.3.3 Trust Build

Table 21: Determinants of Trust in the two cases

<table>
<thead>
<tr>
<th>Determinants of trust</th>
<th>Customer response</th>
<th>Customer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Swedenbookshop.com)</td>
<td></td>
<td>(Gdbook.com)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>capable of performing job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>confident about this company’s</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>goodwill and competence skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualified</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>strong sense of justice</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Initial trust</td>
<td>Build</td>
<td>Destroy</td>
</tr>
</tbody>
</table>

*Source: Authors’ own source*

As table 21 show, final attitudes about two websites are different, swedenbookshop.com gain the customer initial trust successfully as Egger (2003) pointed interface design features are likely to have a non-negligible effect on a user’s subsequent decision to trust and to buy from an online vendor; on contrast, gdbook.com lose the customer initial trust as Berger and Sasse (2001) stated that most interface elements can be seen as trust qualifiers: they are unlikely to get non-shoppers over the 'trial-threshold'. If not taken care of, however, they have a great potential for destroying trust.
Chapter Seven

Findings and Conclusions

At this chapter, we are going to present what we have found about our research, so we could answer our three research questions. Furthermore, we will also give the conclusion of the research and what people can do for the future study.

7.1 Can user interface design have a positive impact on initial trust?

As Egger (2000) proposed interface issues such as usability, attractiveness and perception appear are important determinants of trust model, basing on the analyzed data from the previous chapter, both within-case and cross-case analysis, the results of this study show user interface has a heavy impact on initial trust which could directly affect what will happen later. Totally, we examined two branding factors and seven usability factors as measurements to be significantly related to the trustworthiness of the online merchant. We can therefore conclude that, the general branding and usability of a Website has an impact on the establishment of trust. Only relevance factor seems have a least impact on determining trust. Here, we consider relevance might be an important factor for maintained trust, it is possible that user are not as sensitive or critical about initial trust, relevance might increase the usability of the website without affecting the level of trust.

7.2 How can the user interface properties influence initial trust?

Branding
Like Kim & Moon (1998) mentioned if transpose traditional commerce trust to online commerce, one can hypothesize that the appeal of the interface, the quality of the information provided, as well as the customer-centredness of the system are also likely to have a positive impact on customers’ feeling of trust. Based on analyzed date presented, we can conclude that from user’s view, “looking” good is often interpreted as being good and credible.

Table 22 shows the branding cues we found in this study which might help build trust and destroy trust.
Findings and Conclusions

Table 22: Banding Cues on Building Trust and Destroying Trust

<table>
<thead>
<tr>
<th>Branding factors</th>
<th>Build trust</th>
<th>Destroy trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Simplicity graphics and meaningful layout</td>
<td>● Cluttered, misaligned graphics and layout</td>
</tr>
<tr>
<td></td>
<td>● Transpose offline brand attributes of a trusted brand to the online system.</td>
<td>● Poor distinguish identifiable</td>
</tr>
<tr>
<td></td>
<td>● Distinguish identifiable</td>
<td>● Poor familiarity</td>
</tr>
<tr>
<td></td>
<td>● High familiarity</td>
<td>● No attention to details</td>
</tr>
<tr>
<td></td>
<td>● Good Customer-centredness</td>
<td>● No privacy policy statement</td>
</tr>
<tr>
<td></td>
<td>● Pay attention to details</td>
<td>● Less customer-centredness</td>
</tr>
<tr>
<td></td>
<td>● Privacy policy statement</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ own source

Usability

As Donahue et al (1999) said usability is often mentioned as an important determinant of harmonious and productive online transactions. The result from our study shows low usability equals lost sales. The more high usability a site seems, the more easily gain the people initial trust, this initial trust also stimulate people future explore.

Table 23 shows some usability cues we fond in this study which might help build trust or destroy trust.

Table:23 Usability Cues on Building Trust and Destroying Trust

<table>
<thead>
<tr>
<th>Usability factors</th>
<th>Build trust</th>
<th>Destroy trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Logically structure</td>
<td>● Complex structure</td>
</tr>
<tr>
<td></td>
<td>● Simple and clear classification schemes in homepage</td>
<td>● Complex classification without without clear terminology</td>
</tr>
<tr>
<td></td>
<td>● Ease of find relevant information</td>
<td>● Difficult to find relevant information</td>
</tr>
<tr>
<td></td>
<td>● Ease of use navigation</td>
<td>● Confused navigation</td>
</tr>
<tr>
<td></td>
<td>● Consistent navigation</td>
<td>● Inconsistent navigation</td>
</tr>
<tr>
<td></td>
<td>● Short system response time</td>
<td>● Long system response time</td>
</tr>
<tr>
<td></td>
<td>● No error link contained</td>
<td>● Error link contained</td>
</tr>
<tr>
<td></td>
<td>● Internal consistency</td>
<td>● Inconsistency design</td>
</tr>
<tr>
<td></td>
<td>● High learnability</td>
<td>● Low learnability</td>
</tr>
<tr>
<td></td>
<td>● Good user guidance support</td>
<td>● Poor user guidance support</td>
</tr>
</tbody>
</table>

Source: Authors’ own source
7.3 How can the business-consumer e-merchant build initial trust by designing user interface be described?

According to result we found in RQ2, there are several ways might be useful for strengthen customers’ initial trust toward unfamiliar website:

Transpose offline brand attributes of a trusted brand to the online system. In case a company does not have an offline presence, one can recruit brand attributes from familiar and related trusted companies, so as to constitute an initial trust capital by similitude.

Distinguish features from competitors for memorable, like domain name consistent with company name.

Clean, uncluttered design, Avoid the animation elements and multimedia elements on the homepage. Only use them, if they add value to the presentation of information.

Structure the site in accordance with customers’ domain model and expectations, appropriate levels, and options.

Clearly indicated menus and links.

Make it simple and intuitive, making the website easy for readers and take every step necessary to make reader’s experience as enjoyable as possible and they will come back for more.

Keep internal consistency, like navigation, text, color, and tone across different section.

Minimize click stream navigation design for greater efficiency and satisfaction.

Links should clearly indicate to users where they will end up, preventing errors.

Allow for customization and personalization.

There must be a minimal learning curve for first time users, and as well as provisions for more advanced users to learn features as they become appropriate.

Privacy policy should be provided.

Minimize speed of download.
7.4 Findings

There are still some findings from this study. They are argument with existing theory from previous research.

Firstly, as one of measurements we examined which are significantly related to the trustworthiness of the online merchant, relevant measurement seems doesn’t have strong impact on initial trust. We thought might it fall into relationship management category from long term prospective, it helps maintain trust, increase trust, but less affect on initial trust.

Secondly, about external consistency, customer argue on this issue, standard design with well-know website seems not be a important determinant for initial trust, sometimes fresh design style is a good stimulus for arousing customer interesting to further explore, if it is easy to learn.

Thirdly, the need of site map depends on different situation, we can say if the site with a clear menu and relevant information, the users are not actually interested in where they are within a site as long as the links are clear.

7.5 Implications for Practitioners

After looking through all the study findings, we think that interface properties can definitely affect the result of online-shopping,

So the recommendations are followed here:

- The website designer should consider how to make a good first impression to the customers
- The website designer should think carefully about the user interface properties
- How to make customers further explore your website is very important for the website company

7.6 Implications for The Theory

For this study, we have met the purpose- exploring and describing phenomenon within a specific research area. The aim has been to increase the understanding of this phenomenon by answering the research questions. In this study, we think we have contribute to the theory regarded applying existing theories concerning user interface design and verify their validity.
Regarding research question one and two, the majority of the findings for this study supported the existing theories. Anyhow, our research findings could support what people have studies before and what people will study later. And for research question three, the traditional theories were still applied and valid, and our findings made them stronger.

7.7 Limitations and Avenues for Future Research

This study suffers from a number of limitations. First, when we selected examine usability factors, also factors such as minimal action, memory load, flexibility and compatibility were not included in our study because we chose to use those factors which were easier to evaluate after a few minutes of use and applicable to the web environment. So the scope of user interface in this study is not covered overall. Second, since we did not require that our subjects decide if they were willing or not to go through with the online transaction, it was not possible to evaluate the weight or impact the ten components or antecedents of trust have on this decision. Third, another threat to internal validity could be our selection of test participants. Five Chinese participants were E-commerce students, it means the results are based on a relatively homogenous user population in terms of age, socio-economic background and familiarity with technology. It is possible that their perceptions of trustworthiness are different from other populations because they are younger and have less experience as consumers.

Future research is also needed to identify other interface factors that may impact e-merchant trustworthiness or image, such as the general appearance of the site, attractiveness, playfulness, information quality, support, etc. It is probable that the general look of a site will deter trustworthiness in the vendor even though the general usability of the site is good. It will also be interesting to investigate how these factors weigh compared to usability on trust. Since this research dealt only with initial trust, but trust between a buyer and a seller is maintained over time also would be a fascinating topic for further research.
REFERENCES LIST:


CommerceNet (1997). Barriers & Inhibitors to the Widespread Adoption of Internet Commerce. Available at: www.commerce.net obtained on internet January 12th 2005


Donahue, G. M., Weinschenk, S. Nowicki, J. (1999), "Usability is good business",


2002


Appendix One: Observation Checklist

Branding:
- Professional graphic
- Animation and multimedia plug-in
- Layout features
- Appropriate text, color, text, tone
- Good use of grammar and spelling
- Domain name
- Privacy policy and security issues

Usability:
- Logical structure
- Consistent navigation
- Ease of finding relevant information
- Site map
- Hyperlinks
- Ease of selecting purchase items
- Intuitiveness checkout and ordering process
- Relevant information
- Personalization and customization
- Downloading speed
- Internal and external consistency
- Help category
- Demo
Appendix Two: Questionnaires

Age: __________
Nationality: ______________
Gender: ___________

1. Do you have the past experience on online shopping?
   Yes          No
   If no, end here, and please indicate the reason for hesitation
   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________

2. Based on your past buying experience, which criterions do you think most important to influence your buying decision? (here we will give the some cues, like trustworthiness toward company, security issues, obstacles from internet development)
   _______________________________________________________________________
   _______________________________________________________________________
   _______________________________________________________________________

Thanks for your cooperation!
Appendix Three: interview Guide

1. User interface design and initial trust

- If you first time access the unfamiliar e-merchant website, does your positive feelings about a company’s website user interface quality have a positive effect on your beliefs about the company’s trustworthiness?

- Does this initial trust influence your further attitude about this company?

2. User interface properties

   Branding
   
   - Is the purpose of the website clear from the start?
   
   - Is the graphic design of the website professional?
   
   - Are the color scheme and graphical elements appropriate for this kind of website?
   
   - Does the site pay attention to details, like graphic, textual or navigational?
   
   - Can good use of grammar and spelling be found throughout the site?
   
   - Is the tone used in the texts appropriate?
   
   - Does this site make good first impression for you?
   
   - Is the homepage incites users to explore the site further
   
   - Do you think appeal and professionalism are important factors influencing your initial trust about this company?

   Usability
   
   - Do the pages display correctly in the most popular browsers?
   
   - Is the website is structured logically?
   
   - Is navigation across different sections of the site consistent?
   
   - Is finding relevant information made easy?
   
   - Does the site contain no broken hyperlinks?
E-Commerce

- Is it easy to select items to purchase?
- Is it easy to access the shopping basket and view its contents?
- Is it easy to edit items in the shopping basket?
- Is the checkout and ordering process intuitive?
- Is appropriate feedback given about the different steps in the transaction process?
- Do you think this website is reliable?
- Do you think the factors of usability, such as organization, navigation, relevance, reliability, consistency, learnability and user guidance support are important for influencing your initial trust about this company?

3. Trust build

- Is this seller very capable of performing its job?
- Is this seller known to be successful at the things it tries to do?
- Has this seller much knowledge about the work that needs done?
- Do you feel confident about this seller’s skills?
- Has this seller specialized capabilities that can increase its performance?
- Is this seller well qualified?
- Is this seller very concerned about your welfare?
- Are your needs and desires very important to this seller?
- Does this seller really look out for what is important to you?
- Will this seller go out of its way to help you?
- Does this seller have a strong sense of justice?
- Have you ever wondered whether this seller will stick to its word?
- Do you like this seller’s values?
Appendix Four: Homepage of Two Websites

www.swedenbookshop.com

www.gdbook.com