

# **Consumer Trust in E-commerce**

**The Department of Business Studies** FEC 685 Bachelor Dissertation International Business Program December 2006

Tutors: Håkan Pihl Annika Fjelkner Authors: Malin Gustavsson Ann-Marie Johansson

### Abstract

An often mentioned reason for consumers not purchasing from Internet vendors, is the lack of trust. The lack of physical clues and physical interaction in the online environment make it more difficult to establish trust with the consumers. So, it is important for companies to learn how to manage consumers' trust in e-commerce. Although, building consumer trust on the Internet is a challenge for online vendors.

The purpose with this dissertation was to get a better understanding of consumer trust in e-commerce. We wanted to find important factors that help to establish consumer trust in e-commerce. These factors guided our empirical research, in which our purpose was to investigate how consumers perceive the importance of some selected factors, for them to feel trust to purchase online. We chose to use a survey as our research strategy and the primary data was collected through a questionnaire.

We found that there are many factors that help establish trust, which are relevant for the consumers when purchasing online. Security and privacy are factors that are of great importance for the consumers to feel trust, to purchase online. Businesses are not able to directly control the trust their customers feel. They can just build environments that encourage people to feel trust. A marketplace can be trustworthy, but the participants have to feel the trust before the marketplace can be trusted.

Keywords: B2C, Consumer trust, E-commerce, Internet, Trust

### Acknowledgements

With this bachelor dissertation, we are completing three and a half years of international business studies at Kristianstad University. We are grateful for all the knowledge and experience that we have gained during our education.

We would like to thank our tutor, Håkan Pihl, for his help. We would also like to thank Annika Fjelkner, who has helped us with the English language. A third person that we want to thank is Pierre Carbonnier, who has helped us develop our knowledge of using SPSS.

Furthermore, we want to thank the respondents that participated in our survey. Finally, we want to dedicate our special thanks to our families and friends for all their help and support.

Kristianstad, December 2006

Malin Gustavsson

Ann-Marie Johansson

## Table of contents

| Chapter 1 - Introduction                         | 6    |
|--|------|
| 1.1 Background                                   | 6    |
| 1.2 Problem                                      | 8    |
| 1.3 Purpose                                      | 9    |
| 1.4 Limitations                                  |      |
| 1.5 Research Questions and Objectives            | 9    |
| 1.6 Outline                                      | . 10 |
| Chapter 2 - Method                               | .11  |
| 2.1 Choice of Methodology                        | .11  |
| 2.2 Research Approach                            |      |
| 2.3 Research Philosophy                          | .12  |
| 2.4 Research Strategy                            | .12  |
| 2.5 Data Collection                              |      |
| 2.5.1 Secondary Data                             | . 13 |
| 2.5.2 Primary Data                               |      |
| Chapter 3 - Theoretical Framework                |      |
| 3.1 The Internet                                 |      |
| 3.2 E-commerce                                   | .17  |
| 3.2.1 What is E-commerce?                        |      |
| 3.2.2 Types of E-commerce                        |      |
| 3.2.3 Pros and Cons with Purchasing Online       |      |
| 3.3 Trust  |      |
| 3.3.1 Trust Levels in Transaction Phases         | . 22 |
| 3.3.2 The Concept of Trust                       | .23  |
| 3.3.3 The Trust Pyramid                          | .28  |
| 3.3.4 Individual Characteristics of the Consumer | . 30 |
| 3.3.5 Security and Privacy                       | . 31 |
| 3.3.6 Customer Service                           | . 34 |
| 3.3.7 Framework of Instruments                   | . 35 |
| 3.3.8 Brand and Reputation                       | . 38 |
| 3.3.9 The Website                                | . 38 |
| 3.3.10 Comments and Summary of Factors           | . 39 |
| Chapter 4 - Empirical Method                     | .45  |
| 4.1 Research Strategy                            |      |
| 4.2 Selection Method                             |      |
| 4.3 Questionnaire Design                         |      |
| 4.4 Validity                                     |      |
| 4.5 Reliability                                  |      |
| 4.6 Generalisability                             | . 49 |
| Chapter 5 - Analysis of the Survey               |      |
| 5.1 Introduction                                 |      |
| 5.2 Questionnaire Data                           |      |
| 5.2.1 Questions 1, 2, 3 and 4                    |      |
| 5.2.2 Question 5                                 |      |
| 5.3 Discussion about the results of the survey   | .61  |

| Chapter 6 – Conclusions         |    |
|---------------------------------|----|
| 6.1 Summary of the Dissertation |    |
| 6.2 Self-Criticism              |    |
| 6.3 Practical Implications      |    |
| 6.4 Future Research             |    |
| References                      | 69 |

### Appendices

| Appendix 1. 7 | The Questionnaire in Swedish                             |
|---------------|--|
| Appendix 2. 7 | The Questionnaire in English                             |
| Appendix 3. ( | Calculated mean values of the answers on each subfactor, |
| 8             | according to gender                                      |
| Appendix 4. ( | Calculated mean values of the answers on each subfactor, |
| 8             | according to age   |
| Appendix 5. ( | Calculated mean values of the answers on each subfactor, |
| 8             | according to the respondents' purchase behaviour         |

### List of Figures

| Figure 3.1 Trust levels during transaction phases | 23 |
|---|----|
| Figure 3.2 The Trust Pyramid                      | 28 |

### List of Tables

| Table 5.1 Q1. Gender Distribution                 | 51        |
|---|-----------|
| Table 5.2 Q2. Distribution according to Age       | 51        |
| Table 5.3 Q3. The Respondents' Attitudes          | 52        |
| Table 5.4 Q4. The Respondents' Purchase Behaviour | 53        |
| Table 5.5 Q5a. Security                           | 54        |
| Table 5.6 Q5a. Security                           |           |
| Table 5.7 Q5a. Security                           | 55        |
| Table 5.8 Q5b. Privacy                            | 55        |
| Table 5.9 Q5b. Privacy                            | 56        |
| Table 5.10 Q5c. Guarantees                        | 56        |
| Table 5.11 Q5c. Guarantees                        | 57        |
| Table 5.12 Q5d. Customer Service                  | 57        |
| Table 5.13 Q5e. Familiarity                       | 58        |
| Table 5.14 Q5e Familiarity                        | <b>50</b> |
| Table 5.15 Q5f. The Website                       | 59        |
| Table 5.16 Q5f. The Website                       | 59        |
| Table 5.17 Q5g. Information                       | 60        |
| Table 5.18 Q5h. Control                           | 60        |
| Table 5.19 Q5i. Price                             | 61        |
|   |           |

### **Chapter 1 - Introduction**

In the first chapter the background of the dissertation is described. The research problem and purpose are discussed. The limitations and research questions are defined and finally, the outline of the dissertation is presented.

#### 1.1 Background

The development of new technological innovations, such as the Internet, has brought on changes for the market. The Internet offers a world-wide network, which connects millions of individuals and businesses and creates a global marketplace with huge business opportunities (E-business, eEurope, n.d). More and more companies have discovered the advantage of using the Internet as a communication tool to reach consumers at any place and at any time. This also enables consumers to search and gather information about products and services online. The word e-commerce refers to all transactions online. Electronic commerce (e-commerce) is the area in which we are to do our research and throughout this dissertation we will discuss consumer trust in e-commerce. The term B2C (business-toconsumer) involves the process when a business or an organization sells its products or services to consumers, for personal use, over the Internet. Today B2C includes not only online retailing, but also involves services such as online banking, travel services, online auctions, health information and real estate sites (The ABC of E-commerce, 2006).

The Web is more and more integrated into consumers' normal daily activities. The Web gives the consumers more power to control many aspects of their lives, for example their, time, knowledge, communication, money, decisions and satisfaction. The Internet vendors should enable consumers' control. Consumers need products, services, systems and modes of living that provide convenience and save time (Windham & Orton, 2000). For example, the online store should be easy to reach, the site should be easy to use and products and services should be easy to buy (Loshin & Murphy, 1997).

When using new technologies, including the Web and e-commerce, trust is considered to be important (Windham & Orton, 2000). New ways of doing things usually create a feeling of uncertainty among people. In most social interactions involving uncertainty and dependency, trust is generally an important factor. An often mentioned reason for consumers not purchasing from Internet vendors, is the lack of trust (Petrovic, Ksela, Fallenböck & Kittl, 2003). Thus, there is a need for promoting trust and confidence on the Internet. For consumers, security and privacy issues are seen as barriers to shopping online (Windham & Orton, 2000). They want their identity and personal information to be confidential, due to fear of being exposed to online fraud (Petrovic et al., 2003). People are more willing to take risks with people or organizations which they trust. The potential risk in ecommerce is greater because of the anonymity, distance and lack of physical interactions (Cazier, Shao & St. Louis, 2006). Many elements of personal interaction that are used in the offline environment, for example, facial expression, gesture and body language, are lost or not applicable in an online environment (Grabner-Kräuter & Kaluscha, 2003). Many consumers appreciate the real shopping experience of touching things and trying items on. So, in order to understand why people do or do not engage in ecommerce activities, it is important to study online trust (Cazier et al., 2006).

Trust is an essential tool for a transaction to take place, both in an online and offline environment. In e-commerce, the Internet vendors as well as their websites can be trust building sources in themselves. So, it is important for companies to learn how to manage consumers' trust in e-commerce. Although, building consumer trust on the Internet is a challenge for online vendors. For this reason we think it would be interesting to find out which factors are important for establishing consumer trust in the online shopping environment. By reviewing relevant literature on consumer trust in ecommerce, we aim to find important factors that help to establish trust online. In the end of our theoretical framework, we hope to summarize the most important factors found, and under each of the main factors also summarize examples of, what we call, trust establishing subfactors. From these we will try to select some that will guide our empirical research, where we intend to investigate how consumers perceive the importance of the selected factors, for them to feel trust to purchase online.

So, in this paper we will give an overview of the basic concept of trust and also investigate the elements of online trust. It is difficult to define the concept of trust, partly because trust is always situation-specific. When researchers refer to factors that can help to establish a sense of trustworthiness or which can determine if consumers will trust an Internet vendor or its website, different terms are used interchangeably, for example, elements, underlying dimensions or determinants. This use of various terms is because researchers in the field have not been able to agree on clear definitions of the terms (Wang & Emurian, 2005).

#### **1.2 Problem**

Physical clues in the traditional shopping environment, such as the appearance of the store and the direct contact with sales persons that affect consumers sense of trust, are absent in the online environment. This lack of physical clues and physical interaction in the online environment, make it more difficult to establish trust with the consumers. So, this constitutes a major challenge for companies that engage in e-commerce. Therefore, it is important to find factors that help to establish consumer trust in e-commerce.

#### 1.3 Purpose

The purpose with this dissertation is to get a better understanding of consumer trust in e-commerce. We want to find important factors that help to establish consumer trust in e-commerce. These factors will guide our empirical research, in which our purpose is to investigate how consumers perceive the importance of some selected factors, for them to feel trust to purchase online.

#### **1.4 Limitations**

There are different types of e-commerce, but we have chosen to only focus on Business-to-Consumer e-commerce. So, this constitutes one limitation. B2C e-commerce is a wide subject with many possible aspects to look at. We have made the limitation to look at consumer trust in e-commerce. Trust is a complex concept that can be viewed in many different ways. Therefore, we had to make the limitation to only try to look at literature that takes up consumer trust in connection to e-commerce. It is of course also impossible to cover all existing literature within the topic. Due to time and financial constraints, we had to conduct the survey in a limited geographical part, namely three nearby cites in the south of Sweden

#### **1.5 Research Questions and Objectives**

The dissertation is based on the following research questions:

- Which factors are important for establishing consumer trust in ecommerce?
- From the consumer's perspective, how important are specific factors for the consumer to feel trust to purchase online?

#### 1.6 Outline

The dissertation has the following outline:

Chapter 2 Method:

The choice of methodology is presented. The research approach, philosophy and strategy are discussed. Finally, the data collection of secondary and primary data is described.

Chapter 3 Theoretical Framework:

In this chapter the theoretical framework is presented. The chapter starts with some background information about the Internet and e-commerce. Thereafter, the field of consumer trust in e-commerce is entered. In this section different factors, which are important for establishing consumer trust online, will be presented. The chapter ends with some comments and a summary of the trust establishing factors.

Chapter 4 Empirical Method:

In this chapter the empirical method is presented. The research strategy, selection method and questionnaire design are described. The chapter ends with a discussion about validity, reliability and generalisability.

Chapter 5 Analysis of the survey:

In this chapter the survey is analysed. First, the results of the questionnaire are presented and then the chapter ends with a discussion of the results.

Chapter 6 Conclusions: In this final chapter the dissertation is summarised. Some selfcriticism is given and finally, practical implications and suggestions for future research are discussed.

### **Chapter 2 - Method**

The choice of methodology is presented. The research approach, philosophy and strategy are discussed. Finally, the data collection of secondary and primary data is described.

#### 2.1 Choice of Methodology

Our aim was to get a better understanding of consumer trust in e-commerce. We wanted to find factors that are of importance for establishing consumer trust in e-commerce, as well as investigate how important certain factors are for consumers to feel trust to purchase online. So, our aim was not to build any new theory or model. In order to find relevant trust establishing factors, we searched and reviewed literature on consumer trust and e-commerce. The factors that were found to be relevant, guided our empirical research. In the empirical research we wanted to find out how important some of the factors are, from the consumer's perspective. Conducting a survey, in form of a questionnaire, seemed like the most appropriate strategy, to be able to get a picture of consumers' opinions in the matter. Many studies look at consumer trust towards a specific Internet vendor and its website, but the aim with our survey is to look at consumer trust in e-commerce, in general.

#### 2.2 Research Approach

There are two main research approaches, deductive and inductive, that can be adopted to reach the purpose of a study. A deductive approach is when you identify theories and ideas using the literature, which you then will test by using data. In short it means testing theory. Here you usually use quantitative data, which is the opposite of an inductive approach where you usually use qualitative data. An inductive approach is when you intend to develop theories from analysing the data you collected. After developing theories you relate them to the literature. In short it means building theory. With this approach the need to generalise is not as important as if you use the deductive approach (Saunders, Lewis & Thornhill, 2007). To be able to reach the aim with our study, the deductive approach was the most appropriate one to use. This means we started with reviewing literature, to find relevant factors which were then tested empirically, by collecting quantitative data. Since our intention was not to create a new theory, the inductive approach was not relevant.

#### 2.3 Research Philosophy

Research philosophy relates to the way of thinking, when it comes to the development of knowledge. It is about how the researcher views the world. Three common research philosophies are positivism, realism and interpretivism. The positivistic view means that the researcher is an objective viewer of the social reality and that general conclusions of the findings can be made. The realistic researcher has the view that what the senses show is the reality, the truth. The reality is quite independent of the human mind. Finally, the interpretivistic researcher has the view that the social world is too complex to be able to draw general conclusions and the researcher has to understand the difference between humans in our role as social actors (Saunders et al., 2007). In our research we have adopted the positivistic view. This means that we have tried to stay neutral and not affect or be affected by the subject of our research. However, it is impossible to not include some of our own values as researchers. The findings of our research could perhaps be generalised to some degree.

#### 2.4 Research Strategy

There are a variety of research strategies to choose among, for example, experiment, survey and case study. We chose to use a survey as our research strategy. According to Saunders et al. (2007), this type of strategy is often connected with the deductive approach, which is the approach we have adopted. Using the survey strategy allows researchers to collect a large amount of data from a sizeable population. The data is often obtained by using a questionnaire that enables the collection of standardised data, which

allows for easy comparison. So, this data can be expressed in numbers and analysed quantitatively. For these reasons we found the survey strategy to be the most suitable in our case.

Research purposes can be classified in three different ways, namely, exploratory, descriptive and explanatory. We find our dissertation to be a mix between an exploratory and a descriptive study. The aim of an exploratory study is to find out what is happening; you seek new insights; you ask questions and see phenomena in new light. It is useful when you wish to clarify your understanding of a problem. One way to conduct this kind of study is a search of the literature. A descriptive study is when you need to have a clear picture of the phenomena, which you are to collect data about, prior to the actual collection of the data (Saunders et al., 2007).

Since we study a particular phenomenon at a particular time, our research is a cross-sectional study. Cross-sectional studies also employ the survey strategy, which is the strategy we have chosen. The opposite of this is the longitudinal study, which is the study of change and development over a given period of time (*Ibid*.).

#### 2.5 Data Collection

#### 2.5.1 Secondary Data

We have used different sources of secondary data such as books, articles and the Internet. We mainly searched literature related to our topic and the literature had to be in English or Swedish. However, we also wanted to present a short introduction about the Internet's development and about ecommerce, as background information for the reader. So, we searched literature about this as well. The field of e-commerce is not static, it constantly changes and develops. This can have both negative and positive impact on consumer trust, since it can mean new opportunities but also new uncertainties. For this reason, we have tried to review relatively recent literature. When different researchers are to define factors that help to establish consumer trust, they often highlight different factors. This shows that trust is multi-dimensional and difficult to define. So, the literature we have reviewed take up different dimensions of trust and we have tried to present some of the most mentioned factors, important for establishing consumer trust, in our theoretical framework.

#### 2.5.2 Primary Data

Our primary data was collected through a questionnaire. The purpose with the questionnaire was to gather information about how consumers perceive the importance of different trust factors. The questions in the questionnaire were based on the factors found in our literature review. Prior studies often look at consumer trust towards a specific Internet vendor and its website; however the aim with our survey is to look at consumer trust in ecommerce, in a general way. The questionnaire was handed out to people in various ages, from 18 years and up. We also tried to ask an equal amount of men and women. We chose to ask respondents in the south of Sweden, namely in Hässleholm and Älmhult since we live there, and also in the larger city Helsingborg. Since we handed out the questionnaires in person, we were able to continue the collection of answers until we had gathered our pre-set amount of 200 questionnaires. The collected answers were then processed and analyzed statistically; by using the software program SPSS.

One advantage with using a questionnaire is that it is an efficient way of collecting data. Another advantage is that the respondents answer the same set of questions. Standardised data can be expressed in numbers, and can then be analysed quantitatively, which allows for easy comparison. A disadvantage with using a questionnaire is that it is difficult to form questions that are understandable for the respondents and, at the same time, provide the researchers with the right information needed to reach the purpose. Furthermore, the respondents may interpret the questions differently than intended by the researchers. The reason for this can be that full clarifications cannot be included in a questionnaire, since it has to be kept as simple as possible.

### **Chapter 3 - Theoretical Framework**

In this chapter the theoretical framework is presented. The chapter starts with some background information about the Internet and e-commerce. Thereafter, the field of consumer trust in e-commerce is entered. In this section different factors, which are important for establishing consumer trust online, will be presented. The chapter ends with some comments and a summary of the trust establishing factors.

We will start our theoretical framework with presenting some background information about the Internet and its development. This will serve as an introduction to the subject of our dissertation. In the next section a short presentation about e-commerce will be given. We find it relevant to introduce the reader to the area of e-commerce, before entering the field of consumer trust in e-commerce, which is the topic of our dissertation. We aim to answer our first research question in this chapter.

#### **3.1 The Internet**

The Internet is a network of computers and smaller networks, which enables computers around the world to communicate with each other, for example by transferring files and documents. Smaller networks are connecting to the big network, the Internet, all the time and because of this the Internet is constantly changing and growing (SOU 1999:106). These new networks offer new opportunities for people, but they also involve new uncertainties. New ways of doing things usually create a feeling of uncertainty among people. Thus, there is a need for promoting trust and confidence on the Internet.

In the 1960's, the military in the USA created a network called the ARPANET (Advanced Research Projects Agency Network) which was the start of the Internet. Early on American universities also started to use this network to enable scientists at different universities to get easy access to

scientific rapports. By the 1980's, the network had expanded which led to the decision to split it up in two parts, the MILNET for the military and the smaller ARPANET for civilians. The ARPANET was eventually closed down and replaced by the NSFNET (National Science Foundation's Network). In 1982, the big network was named the Internet. Networks for universities were also created in other countries, for example the network SUNET (Swedish University Network) in Sweden, which in 1988 became a part of the Internet. The commercial development started in the 1990's, when the Internet also became available for companies and private users through commercial networks that were created around the world (SOU, 1999:106). The Internet connects billions of users all over the world and about 1.1 billion people use the Internet today. So, out of the world's population, which today is about 6.5 billion people, approximately 17% are using the Internet. In Sweden about 6.8 million people are using the Internet and this is about 75% of Sweden's total population, which is approximately 9.1 millions (Internet World Stats, 2006).

Today the Internet is used for many different things, for example the possibility to send electronic mail (e-mail) is widely used. For people living in different parts of the world, e-mail is a fast, simple and cheap way to communicate. The creation of the World Wide Web (WWW) is an important part in Internet's development (SOU, 1999:106). The Web is not synonymous with the Internet; it is just another way to use the Internet. Users can, for example, download documents and get information from different websites on the Internet (SOU, 1999:106). The World Wide Web "has forever changed the way companies and customers (whether they be consumers or other businesses) buy and sell to each other, learn about each other, and communicate" (Hutt & Speh, 2004, p.69). Today, millions of homepages/websites are owned by organizations and individuals (Slevin, 2000). The Web is more and more integrated into consumers' normal daily activities and can help make their lives easier. It gives the consumers more power to control many aspects of their lives, for example their, time, knowledge, communication, money, decisions and satisfaction. On the Web, the consumers have access to more people, things and information and they

also have more freedom to speak, be heard and make choices. Furthermore, it is easier to make price comparisons, which enables the consumers to find the lowest price that can help them to save money. The control of the Web experience is shifting from the company to the consumers, this because the consumers demand it. To listen to consumers' needs is important for getting loyal customers (Windham & Orton, 2000). Furthermore, the Internet is a source to search and gather information from. Electronic commerce (e-commerce) is another area of use, which will be presented more in detail below.

When using new technologies, including the Web and e-commerce, trust is considered to be important. New technology involves changes and these changes often create anxiety among people (Windham & Orton, 2000). This anxiety probably comes from lack of knowledge and lack of experience of the new technology. New technology is worthless if people do not understand how to use it and if it is not user-friendly. Companies that can offer usable functionality and user-friendliness are the ones that will be successful. Young people that grow up with the Internet today will probably get more used to the idea of shopping online. They get familiar with the concept of e-commerce from an early age. They adapt quickly to new technology and new ways of doing things. So, e-commerce will probably be a normal way of shopping for many people in the future. E-commerce has increased substantially during the last years and will continue to increase in the future, partly due to cheaper and better technology. The expansion of broad-band might also have contributed to the increase of e-commerce (Hansen, 2005).

#### 3.2 E-commerce

#### 3.2.1 What is E-commerce?

E-commerce involves "business communications and transmissions over networks and through computers, specifically the buying and selling of goods and services, and the transfer of funds through digital communications" (Hutt & Speh, 2004, p.119). In short, e-commerce constitutes a medium for the buying and selling of products and information on the Internet and for other online services. When used properly, the Internet is a powerful tool with significant advantages. The Internet usually supports or supplements existing channels of distribution, rather than replacing them. Also, the Internet facilitates the salesperson's efforts and enhances the effectiveness and efficiency of the sales function, rather than eliminating it. The Internet has made it possible for consumers to buy products and services online, from both national and international companies. E-commerce is a way to do business in certain markets and for selected customers, which can increase sales volume, lower costs or provide more real-time information to customers (Hutt & Speh, 2004). Organizations are able to store large amounts of information on their websites. This information is available around-the-clock, which facilitate communicative relationships with users all over the world. The users do not even have to go outside the door (Slevin, 2000). Many customers seek information online and make their purchases offline.

#### 3.2.2 Types of E-commerce

The e-commerce market is very complex and can be used for different purposes. One sector is business information services, for example, services selling captured customer information to others for marketing purposes. It can also be advertising found on websites and search engines (Slevin, 2000). E-commerce can be categorized in different ways.

In the book "Konsumenterna och IT – en utredning om datorer, handel och marknadsföring" by SOU, Statens Offentliga Utredningar (1999:106), two types of e-commerce are mentioned, indirect and direct. Indirect e-commerce is when a consumer orders a product online, pays through an invoice or by cash on delivery and gets the product delivered in a traditional way. Direct e-commerce, on the other hand, is when the consumer orders, pays and also gets the digitalized product, such as games, music and services delivered online. There are different types of both direct and indirect e-commerce.

Other types of e-commerce, which are more known, are: B2B (Business-to-Business), B2C (Business-to-Consumer), C2B (Consumer-to-Business), C2C (Consumer-to-Consumer), B2G (Business-to-Government) and M-commerce (mobile commerce), (WikiBooks, 2006). In this research we have chosen to focus on Business-to-Consumer E-commerce. B2C E-commerce facilitates (Hutt & Speh, 2004, p.121):

- 1. *Product information*: information on new and existing products is readily available to customers on the firm's Web site.
- Sales: certain products can be sold directly from the firms Web site, reducing the cost of the transaction and allowing the customer to have real-time information about their order.
- 3. *Service*: customers can electronically communicate about order status, product applications, problems with products, and product returns.
- 4. *Payment*: payment can be made by the customer using electronic payment systems.
- 5. *Marketing research*: firms can use e-commerce, the Internet, and their own Web sites to gather significant quantities of information about customers and potential customers.

E-commerce providers are companies and organizations that are offering tools and products for electronic commerce. According to Loshin and Murphy (1997), for consumers the most important aspects of an e-commerce provider are the following:

- *Reliability*: The credit and charge card company is relied on to extend credit, extend protection and to settle the payment. The same reliability is expected of the electronic commerce service provider.
- *Security*: Security issues will never disappear completely, but the security provider must try to find possible weaknesses and define new security solutions for these.
- *Simplicity*: Electronic commerce schemes are successful if they are simple, painless and easier than transacting business in person.
- *Acceptability*: Electronic commerce schemes should offer widespread acceptability.

#### 3.2.3 Pros and Cons with Purchasing Online

E-commerce is continually growing and people purchase online for a number of reasons and according to Hansen (2005), the four main reasons are:

- *Convenience*. It is possible to order almost anything you want, without even having to step outside the door.
- *Greater supply*. Online you can find more variants of a product, than you might find in a traditional shop, since online stores can minimize their storages due to close collaboration with wholesalers.
- *Lower prices*. Online stores are able to cut expenses. For example they can lower the storage costs, which enable them to offer lower prices.
- *Price comparison*. The consumers have the possibility to compare competitiors' prices on products and services. Consumers can either do this themselves or with the help of an online agent, like Price runner, which does the comparison for them.

Furthermore, Windham and Orton (2000) states that additional reasons for purchasing online are that it saves time and also that people are more empowered because of better product information and because of the possibility to compare different vendors' offerings. However, there are also some negative aspects to online purchasing. These are, for example, that some products are not conducive to an online purchase and that many consumers appreciate the real shopping experience of touching things and trying items on. Another negative aspect is the problems connected with returning products that do not meet the consumer's requirements. Also, if the customers are not familiar with or trust the company's brand, then they are hesitant to perform online commerce. Since the physical experience of shopping in a traditional store is absent in e-commerce, the trust issue becomes a major concern for many consumers and a strong reason for not purchasing online.

#### 3.3 Trust

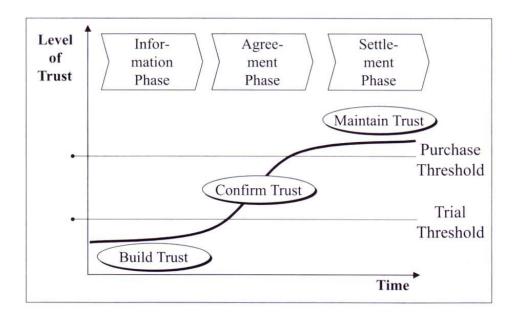
Online shopping requires more trust, since it is more complex than shopping in a traditional environment. On a public network, like the Internet, it is not easy to establish trust between the buyer and seller. In most social interactions involving uncertainty and dependency, trust is generally an important factor. One group of researchers finds that: "Online transactions and exchange relationships are not only characterized by uncertainty, but also by anonymity, lack of control and potential opportunism, making risk, and trust crucial elements of electronic commerce" (Petrovic, Ksela, Fallenböck & Kittl, 2003, p.55). Trust is a mental shortcut that consumers can use, when trying to reduce the uncertainty and complexity of transactions and relationships in electronic markets. An often mentioned reason for consumers not purchasing from Internet vendors, is the lack of trust (Petrovic et al., 2003).

Online it is difficult to connect identities with actual individuals. Therefore, an online transaction does not give the same opportunity, as an in-person transaction, to exercise judgement about the other party. For example, consumers cannot know how long a website has existed or if it still exists tomorrow. Online it is easier to construct a counterfeit website, and represent it as part of a large corporation, than to construct a counterfeit supermarket in the traditional marketplace. So, the consumer cannot feel totally protected from dishonest vendors, with the hidden agenda to just get hold of the consumer's credit card number (Loshin & Murphy, 1997). The reluctance towards online shopping, that might exist among consumers is not expected to totally disappear, but might be reduced with the help of increased familiarity, technological advances and legal/regulatory institutions (Petrovic et al., 2003). Different tools and techniques are needed for establishing trust between potential buyers and sellers, in online transactions (Loshin & Murphy, 1997). Throughout the rest of this chapter, we will give a more detailed presentation of trust and consumer trust in ecommerce. We will start with a discussion of the concept of trust in a general way, before presenting different trust establishing factors.

Researchers have highlighted different factors that are important for establishing consumer trust in the online environment. Trust is a multidimensional construct and there is no common model for trust in ecommerce. So, the literature we have reviewed take up different dimensions of trust and we will try to present some of the most mentioned factors, important for establishing consumer trust. In the end of the chapter, we will sum them up. When reading the rest of the chapter, you will notice that when researchers refer to factors that can help to establish a sense of trustworthiness or which can determine if consumers will trust an Internet vendor or its website, different terms are used interchangeably, for example, elements, underlying dimensions, tools, techniques and instruments.

#### 3.3.1 Trust Levels in Transaction Phases

Trust in online transactions is often said to be a key factor for determining the success and failure of e-commerce. The process of buying and selling goods, in each individual transaction, consists of a variety of phases such as the information, agreement and settlement phase. Figure 3.1, on the next page, illustrates the trust levels during the various transaction phases. Online, the information phase usually means the activity of browsing through an online store. In the agreement phase, customers show their agreement by choosing products and accepting the price. In the settlement phase of the transaction, the order is placed and payment performed. We assume that the same phases can be applied to the process of buying and selling services online. The transaction phases trust can be fostered with the help of seals and insurance solutions, for example, "seals of approval", money back guarantees and dispute resolution systems. (Petrovic et al., 2003).



#### Figure 3.1 *Trust levels during transaction phases*

(From: Petrovic, O., Ksela, M., Fallenböck, M. & Kittl, C. (2003). *Trust in the Network Economy*. Vol. 2. Wien: Springer-Verlag Wien New York. p.339)

#### 3.3.2 The Concept of Trust

It is difficult to define the concept of trust, partly because trust is always situation-specific. Researchers have not been able to agree on a suitable definition of the term. One definition often mentioned in literature on trust in e-commerce, is "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 important to the trustor, irrespective of the ability to monitor or control the other party" (Petrovic et al., 2003, p.57). The buyer is usually the party putting him or herself in a vulnerable situation. The trustee, the party in whom trust is placed, is the Internet vendor, who can take advantage of the trustor's vulnerability (Ibid.). Moreover, researchers have different opinions on how to measure the trust construct. One group of researchers thinks that the trust construct should be measured by one single dimension, such as reliability or motivation. Another group of researchers argues that the trust construct is multi-dimensional. This is clearly the right way to see it. There are some characteristics that can help in judging the trustworthiness of the Internet vendor, namely competence, benevolence

and integrity. In the literature, these are described as three dimensions of consumer trust and by focusing on each of these; overall consumer trust for an Internet vendor can be established. Competence means the company's fulfilment ability of its promises, communicated to consumers. Benevolence is about how the company primarily focuses on the interests of the consumers before its own self-interest and to have a sincere concern for the welfare of the consumers. Finally, integrity means behaviour of consistency, reliability and honesty, when the company fulfils its promises (Chen & Dhillon, 2003). So, it can be said that these three dimensions explain a significant part of a company's trustworthiness.

Trust is based entirely on people's perception of it and on how it is experienced by individuals. A marketplace can be trustworthy, but the participants have to feel the trust before the marketplace can be trusted. Trust is important to us, but we cannot easily specify which factors that strengthen our trust. To make it more concrete, some aspects of trust can be identified. Trust exists between people; it makes human interaction easier. Trust is a crucial aspect in any kind of relationship. Meaningful trust is built in mutual relationships. If you trust the other party, then you are more willing to cooperate. It involves a risk, the first time you trust someone. For people to take that risk, they need to believe that the trust will be repaid. Trust takes a long time to build. We want to be able to trust others and if our trust is betrayed, then we feel vulnerable and anxious. A betrayed trust takes a long time to re-build, if it is even possible. Since it is hard to measure trust, it is good to find some easier way to express it, to give a sense of it. One example is that some websites provide a mark which shows the sites' trustworthiness (Rule & Friedberg, 2005).

Even though trust and safety are related, these two words are different in some ways. Safety is about the protection from harm, for example, seat belts are for keeping you safe, but they do not raise your trust about that other people will drive carefully. Trust, however, is when you feel sure that other people will act in a fair, respectful, honest and transparent way. So, safety does not automatically mean that other people will act benignly and although protected from others' actions, it does not automatically mean that one feel more trust (*Ibid*.).

Fear, risk and uncertainty limit people's activity and freedom. Businesses see trust as valuable, since it helps people to defeat barriers and makes trade and interactions easier. Businesses spend more money to establish trust, because they see the positive effect that trust has. Trust helps the business to grow, by promoting positive experiences, affirmation word of mouth and transaction volume. Customers will probably not use a site or service that they do not trust. Negative experiences may be shared with others, which can affect the business's growth negatively. A site or service can be unsuccessful and unused, not only because of lack of trust, but because the service is not seen to have enough value or the user interface is not well designed. Trust is not the only factor that determines if a site or service will be successful and well used. A site might have a negative trust reputation, but the service is perhaps seen as so valuable that the trust risk involved is accepted. One example is the frequently used peer-to-peer file sharing services, which involves the risk of getting viruses and worms.

Firstly, trust is gained through reputation and after that through repeated experience. A reputation can come from sources such as, the media and friends. Recommendations made by people that the consumer trusts, have great influence when the consumer decides whether a site or a vendor is trustworthy. If the individual then chooses to use the marketplace, the actual experience will be added to the reputation. A combination of factors creates an overall feeling of trustworthiness of a marketplace. One successful transaction does not notable affect the sense of trust felt by the user. It takes longer time and a great deal of experience to develop positive feelings about trust. However, negative feelings about trust can occur after just one or two negative experiences. We tend to remember negative experiences much longer than positive experiences (*Ibid.*).

It is too much to ask for complete safety and avoidance of all problems. Members must take some risk, if they want to engage in interesting and beneficial exchanges. Businesses can teach customers how to avoid trust abusive situations and problems. The business does not have the sole responsibility for ensuring that no problems will arise, people can still act stupid and irrational. The sites or services are usually blamed for the wrongly actions of their members (buyers and sellers). Trust can depend on circumstances that the site or service cannot control. There are different techniques that can be used to establish a feeling of trust on a site. Businesses are not able to directly control the trust their customers feel. They can just build environments that encourage people to feel trust. In some situations, some techniques will work better than others, but it is important to consider all trust building options when creating the complete trust building strategy. Examples of techniques that are used to promote trust on the Internet are (*Ibid*.):

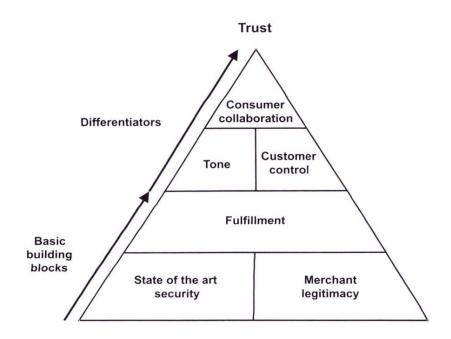
- *Marketing*: To create a convincing message around trustworthiness and to get it out to potential customers through marketing is an important way to start to develop trust. So, marketing give the company a chance to convince potential customers that its website is legitimate.
- *Education*: For a potential user, clarification about how a process, site, or service works can often help to establish a basic confidence. Offering compelling educational material that explains things in a step by step manner, can decrease concerns and increase comfort.
- *Trust seals*: Organizations can have seals, by putting a certifying body behind a particular mark, to benefit from the certifying body's trustworthiness. To use assurances like this, the certifying body has to grant a so called "seal of approval".
- *Community*: Word of mouth is an effective way to communicate trust.
   By the help of the community, positive trust messages about a site or service can be spread. People with bad experiences, on the other hand, can spread negative messages. However, community's net effect is mostly positive.
- *Transparency*: The best way to avoid damaging trust is to be clear about information, to facilitate direct communication between community

members and to be sincere about situations that appear and not hiding them.

- *Protection*: A sense of trust can be established with the help of protection programs. These programs offer a safety net, for members to lean on if something goes wrong.
- *Code*: Powerful mechanisms for building trust come from the code underlying a site or service. Since the actual code is not obvious to the users, they may relay on other visible elements (for example, quality user interface design, speed, reliability) to get an impression of the trustworthiness.
- *Dispute resolution/redress*: Online dispute resolution offers a possibility for a negative trust experience to be resolved without that the member's view of trustworthiness in the site or service is being considerable harmed. Studies show that members that have resolved a problem satisfactorily seem to be more loyal to the marketplace afterwards.

#### 3.3.3 The Trust Pyramid

To build trust that leads to satisfied customers is a crucial and complex task. Petrovic et al. (2003) identifies six elements, which when combined build a "trust pyramid". The six elements can be seen in figure 3.2 and a short presentation of these will follow below.



#### Figure 3.2 The Trust Pyramid

(From: Petrovic, O., Ksela, M., Fallenböck, M. & Kittl, C. (2003). *Trust in the Network Economy*. Vol. 2. Wien: Springer-Verlag Wien New York. p.90)

The three core elements needed just to stay in business are secure technology, merchant legitimacy and robust order fulfilment. These form the base of the pyramid. Above these basic elements there are more subtle trust builders that a company can use to differentiate itself and these are tone, customer control and consumer collaboration. The six elements of trust, together, create comfort and confidence that is needed to get satisfied and loyal customers.

• *State of the Art Security*: It is important to use the most reliable security measures on the website. This should also be communicated to consumers in an understandable language.

• *Merchant Legitimacy*: On the Web brands are important; since they can help consumers make their choice when they only have limited information about the products' quality and functionality. Familiar names with reputable performance records can be very helpful in building trust.

• *Fulfilment*: Order fulfilment is the next requirement of a trust building website. Customers want to place an order and receive it efficiently without any major problems. Not clearly defined actual costs can also have a negative impact. So, it is important to explain all costs and make sure that the right buyer gets the right product in time.

• *Tone and Ambience*: The trust building is more than just the technical features of a website. Consumers want to be assured that their personal information will be handled with sensitivity. If this is not guaranteed then the consumers will not go through with the purchase. The company should post an easy-to-read privacy statement on the website, which explains how personal information is collected and handled. Other essential elements are design and content. Some things that have an influence on the consumers are, ease of site navigation, the site's appearance and an uncluttered friendly setting.

• *Control*: When the consumers know that they control access to personal information, they learn to trust. A smart approach for the company is to ask permission to get personal information. Thus, to feel in control of the buying process is appreciated by the consumers.

• *Collaboration*: One way to nurture trust is to encourage the customers to contact and inform each other about the company's product and service offerings. When consumers are considering whether to purchase a certain product or service online, advices from other users of that product or service is often highly valued. To purchase a service seems more risky since it is difficult to evaluate the quality of the service. Therefore recommendations from other users are even more valuable when considering whether to purchase a service.

These six elements do not automatically lead to deep, trusting relationships. The consumer and the company can exchange value in a step-by-step process, through which trust is systematically built. Every time the consumer willingly submits some personal information, it should be rewarded with personalized services and richer experiences. This mutual give-and-take process will lead to an advanced trust-based collaboration (Petrovic et al., 2003).

#### 3.3.4 Individual Characteristics of the Consumer

According to Chen and Dhillon (2003) consumers are one source for trust, since "consumer trust for an Internet vendor can reside in the individual characteristics of the consumer" (Chen & Dhillon, 2003, p.307). So, the perception of competence, benevolence and integrity (mentioned earlier) of an Internet vendor is considerably influenced by individual characteristics. Examples of individual characteristics are presented below.

• *Disposition to trust*: Besides external stimuli from the Internet vendor, consumer trust is also based on individuals' personality. The consumer normally develops a basic concept of trust during his or her childhood and this in turn, influences the willingness to depend on others across a wide spectrum of situations and persons. Two types of disposition to trust can be distinguished, which to some level affect trusting intention. These are faith in humanity and trusting stance.

• Attitude towards online shopping, subjective norm, and behavioural control: The consumer's perceptions of shopping convenience mirror his or her attitude towards online shopping. This can be measured by the extent to which the Internet is accepted by the consumer, as a new shopping place and how useful it is. Subjective norms "refer to a consumer's perceptions of the extent to which significant referents approve of Internet use for shopping" (Chen & Dhillon, 2003, p.307). Perceived behavioural control "is reflected by the perception of ease-of-use of the Internet as a shopping means, perceived control in interaction (e.g., the use of personal information), and perceived risk in E-commerce (e.g., system security and privacy)" (Ibid.).

• *Past purchase behaviour*: A consumer's trust in an Internet vendor may be influenced by the consumer's past online and e-store experiences, since

knowledge and/or experience can lead to an increased assessment of an Internet vendor's trustworthiness (Chen & Dhillon, 2003). New consumers that are highly experienced become more demanding of the web performance and behave more habitual (Windham & Orton, 2000). The level of perceived risk toward purchasing online is lowered by more internet experience and experience of using other remote purchasing methods. A lower level of perceived risk results in increased online purchase rates.

 Personal values, gender, age, and education: Values are incorporated into people's value systems and are prioritized according to their relative importance as guiding principles. So, the value system works as a guideline for behaviour and the interpretation of experience by arranging criteria that a person can use to assess and make sense of events and actions in the surrounding world. One's value system determines desirable or undesirable types of behaviours, events, situations, or people. If a person's value system emphasises loyalty and honesty, then the person strive to be loyal and honest in relationships with others. Values contribute to the generalized experience of trust and can create a propensity to trust that goes beyond specific situations and relationships. Furthermore, gender is found to influence a person's purchase intention or behaviour. When assessing another person's trustworthiness, males and females look for different qualities in that person. For males, factors such as reliability, emotional trust and general trust emerge and for females, reliability and emotional trust factors emerge. Other important variables that influence consumer behaviour are age and education level.

#### 3.3.5 Security and Privacy

A consumer's willingness to pay online is determined by convenience and trust. If it is too complicated for the customer to register and use the technology, then the customer may not go through with the purchase. Furthermore, it is important that the customer feels secure about not being exposed to fraud or that the money disappears due to technical problems (Hansen, 2005). There are different ways to pay for a product or service online, for example, by cash on delivery, invoice, digital wallets and

payment through credit card online or transference by bank (SOU, 1999:106). Two other payment methods that start to gain ground are, direct micro payments via SMS and pay phone numbers. There are pros and cons with each payment method and each method may be more or less suitable for different kinds of transactions and customers (Hansen, 2005). The use of credit cards for payments online has received the most attention. This method usually means that the consumer states the card number on an online form. The company then receives payment from the credit institute. This is considered to be a fast and simple way for the consumers to pay and today, more and more consumers use this method. However, safety questions have been a big concern for the consumers (SOU, 1999:106). For customers that pay with credit card, it is more important to buy safely than to buy cheap (Hansen, 2005). They are, for example, worried that the card number will be revealed to unauthorised parties (SOU, 1999:106).

Some people however, seem to forget the risk involved with credit card payment in a physical store or at a restaurant, where the card number is also exposed to a stranger. The difference from an online payment is that here the customer is able to see the person that receives the credit card. It is important that the payment system really works, when the customer decides to use it (Hansen, 2005). Online payment systems are constantly updated to make them more user-friendly and secure. These systems make the identification of the consumer more reliable. For consumers to have confidence in e-commerce, the development of reliable payment methods is necessary (SOU, 1999:106). If a service does not give a trustworthy and professional impression, for example if the information provided is unclear about who owns the company or which third party that administers the card payment, it might make the customer hesitant (Hansen, 2005). However, a clearly stated third party organisation can provide an extra level of security for the customer. By taking the payment information from the customer and settling transactions for the vendor, the third party can act on behalf of both. For the customer, this means that payment information is handled by the intermediary company and never revealed to the vendor. This also facilitates relatively anonymous purchases for the customer (Loshin & Murphy, 1997).

As new security solutions are developed, it is important that Internet vendors do not forget to also inform their customers about how these new solutions work. To take one example, it may not be obvious for customers that today sensitive information is encrypted when sent over the Internet, to ensure reliability and privacy (Hansen, 2005). The payment settlement information can be encrypted by the customer before being sent to the vendor. The vendor then passes it on to the customer's bank, which decrypts it and arranges for the payment to the vendor. Although encryption is said to ensure reliability and privacy, this security solution, according to Loshin and Murphy (1997), still have security holes. Sometimes, it seems like the threats to security are growing faster than the solutions are. Hackers always seem to be one step ahead (Shoniregun, Omoegun, Brown-West & Logvynovskiy, 2004). For example, today identity theft is a growing problem (Cazier, Shao & St. Louis, 2006). Therefore, it is not strange that the Internet security is a major concern which makes customers hesitant to shop online. To conclude, assuring security and reliability are two main factors relevant for the customers when purchasing online and for establishing trust.

Most of the reasons that make customers reluctant to provide personal information to a website come from trust. They are concerned about their privacy and security and they fear spam. Potential customers may feel hesitant to purchase online, if they are asked to state their social security number in connection with the order. When a social security number is requested, people often get suspicious and insecure. So, if customers are to state sensitive information about themselves, it is important for the company to clarify that this information is handled according to specific legislation in this area, in Sweden the legislation PUL, Personuppgiftslagen (Hansen, 2005). This is a way to guarantee that the personal information will not be misused or sold to other parties (Windham & Orton, 2000). This kind of assurance can limit the customers' concerns and can increase the sense of trust.

#### 3.3.6 Customer Service

Websites sometimes offer only a limited possibility for customers to get feedback and to ask questions. Sometimes, sending an e-mail is the only way to get in touch with the company. For customers this might create a feeling of lack of power (Slevin, 2000). So, it is important to provide different ways for the customers to get in touch with the company, since this promotes interactivity which can help strengthen the customers' sense of power. Feeling power can help reduce uncertainty, which then can increase trust. It is also important that the company shows its responsiveness and willingness to help, by giving the customers prompt replies to their requests. If a company neglects an incoming e-mail or does not give a fast reply, the customers might feel unimportant and for this reason they might turn to a competitor's site for answers. In short, trust can be built by making the customers feel that they are important. One way to inspire trust and confidence is to assure that the customer service staff gives a professional and knowledgeable impression.

According to Hansen (2005), many online customers have not gone through with a purchase, because they were not satisfied with or did not trust the service. Some customers have even been forced to finish an online purchase over the phone. To receive online help during the order/payment process, can be appreciated by the customers. So, it is of great importance that the Internet vendor provides better and more trustworthy services.

Creating facilities on the company's website, such as discussion forums, where the customers can interact with each other, can be a good way to attract users to the site. These kinds of discussions, between the customers, can provide interesting and useful information for the company, which can be used to improve service performance (Slevin, 2000). This can give an impression about the company's desire to satisfy the customers' needs and build long term relationships. In this way the company can also promote word of mouth recommendations. The company can also get useful information by, for example, encouraging potential customers to post a

question if they cannot find the information they need (Hutt & Speh, 2004). For the site development to progress successfully, user-feedback is required (Windham & Orton, 2000).

For a consumer to purchase from a store online, a strong sense of reliability is necessary. A company's ability to establish strong bonds of trust with its customers through a website is crucial for its success online. Although it is not just a question of establishing trust; the company also has to be active in convincing customers since the competitors are only a mouse click away. It is also important to nurture an established customer relationship, by for example, sending out information and advertising in newsletters via e-mails. To be notified with information about the company can strengthen the loyalty and the sense of trust. Although, customers appreciate to have the possibility to choose whether or not they admit to receive advertising that rely on the registered personal data. So, the customers want to have more control over the personal information and the companies need to respect their privacy.

#### 3.3.7 Framework of Instruments

Petrovic et al. (2003) have applied a framework, based on findings from studies made by different authors, that contains three different categories of instruments that can make transactions and cooperative relationships more efficient. So, these instruments can be used by Internet vendors to influence trusting beliefs, intentions and behaviours of online consumers. The three categories of instruments are:

• *Information policies*: Information asymmetry exists when, for example, one party has information that the other party does not have and this can lead to an opportunistic behaviour (Tan & Thoen, 2000). Information asymmetries between sellers and buyers can be reduced by using different communicative channels, for example, advertising, direct marketing and public relations. In e-commerce the website is the medium between the consumer and the vendor. The website gives an important clue about the

online vendor's efficiency and reliability. To be able to create positive customer experiences with the website, it is important to have an informative and understandable website. This is a start for building trust. Some examples can be given of communicative information that the Internet vendor can present to the customers, to help establish a sense of trust. One example is to present the company by having an "About us" section at a visible place on the website. Information about number of physical stores or if the company is leading in its sector, can give the customers an idea about the company's size. A larger company may be perceived as more trustworthy. It can also be important to provide information about who owns the company and number of years in business.

Another example is to increase the social presence on the website. Social presence is defined as "the extent to which a medium allows a user to experience others as being psychologically present" (Gefen & Straub, 2003, p.11). So, the social presence can be increased by having message boards and chats that make real-time interaction with the company's salesrepresentative possible. Or else, the website should provide mailing addresses and/or toll free telephone numbers to the company and to the online customer service and these should be easily accessible for the customers (Petrovic et al., 2003). Many credible companies that handle customer service calls online also maintain a customer service group that takes care of problems over telephone as well (Windham & Orton, 2000). This can be a proof of good customer relationship management. According to Windham and Orton (2000), consumers often claim that they prefer to speak to a live customer service representative, to make sure that issues are resolved immediately. So, increased social presence on the website can increase customers' trust which in turn can lead them to the decision to purchase.

An additional example of presenting communicative information is to publish a "Privacy Policy" on a visible place, which covers aspects of data security, data mining and data usage. The company can also include visible cues, on the site, of the security policy and of the standard terms concerning the purchase agreement. The consumers may have to click on a separate link to read the standard terms or these can be found in connection to the order form. In the latter case, it is common that the consumers have to "click" through the terms and perhaps accept these, to be able to complete the order form. When consumers are in the order process, they should have the possibility to go back and change inserted data or to exit the process, at any stage. After placing an order, the customers want to get a confirmation on their order. All these things help to increase consumers' trust.

• *Reputation policies*: The reputation can enhance trust. If a company has an established good reputation customers can be more sure that the company will not act opportunistic, since it has much more to loose in case of a bad behaviour. Reputation is the result of trustworthy behaviour and can be a determining factor for the willingness to engage in exchanges with an actor. A company with a good offline reputation can benefit from this online, when using the Internet as an additional distribution channel. A company should try to get the most out of the benefit of having a good reputation. Negative incidents, on the other hand, can be negative for a company's reputation. A lack of good reputation can be compensated by different trust building measures and activities. One way to increase the reputation is to use virtual communities where customers can share experiences. The company can also use advertising and marketing campaigns. Furthermore, another way to increase the reputation is to cross-link a company's website with credible reference sites or by taking part in well-known electronic marketplaces.

• *Guarantee policies*: These are promises to limit or compensate for damages, caused by negative events, which cannot be totally ruled out by the parties. Showing evidence of sufficient guarantee policies on the website is important. Guarantee policies can cover possible returns, refund, security issues and credit card loss. The Internet vendor should support these policies with information and reputation policies. It is easier to build and maintain consumer trust if guarantee policies are combined with certificates of trusted third parties. This is only effective if the consumers are familiar with the

meaning of the certificates. As we mentioned before under the section information policies, it is important to state standard terms as a guarantee for the consumers. To give them confirmation on the order and purchase is also important.

#### 3.3.8 Brand and Reputation

For companies engaged in electronic commerce, reputation and brand have been claimed to be a vital source for trust. Reputation has the power to reduce uncertainty and constitutes a way to create trust. The brand is the different things that the buyer thinks of when he or she sees the name or symbol. Thus, the brand is stored in potential consumers' minds. The brand image is the intangible psychological elements of a brand. The brand image is stored in each person's memory, while the reputation is a socially shared evaluation of the company. However, these two also influence each other. It is important to foster and strengthen an existing brand image with trusting beliefs that are relevant for the environment online (Petrovic et al., 2003). If a brand is unfamiliar, it can be difficult for the customers to see the credibility of the company behind the brand (Windham & Orton, 2000). If a company wants to establish a trustful customer relationship, it should strive to develop a brand personality that acts as a partner or friendship link between the brand and its customers. The e-commerce environment is perceived to be risky and impersonal, so it can be helpful to bring about "human-like" associations to foster trust (Petrovic et al., 2003). Hansen (2005), however, has a different opinion about the importance of the brand. He claims that the average online buyer does not pay so much attention to the brand. It is more important how the website looks and works.

#### 3.3.9 The Website

A potential customer's first impression of an Internet vendor's website is crucial for grabbing the customer's attention and for creating a sense of trust. It is not enough to just have a flashy design. The Internet vendor should not use unnecessary design; instead keep it simple and clear. This since, a complicated website is too time consuming and customers today often have a lack of time and want things to go fast and simple. So, the vendor should respect the customers' lack of time (Hansen, 2005). Furthermore, it can be mentioned that it is important that the information a company stores on its website is continually updated, correct and easy to read. Also, the website must contain the most crucial information from the customer's perspective. The website should not be too advanced and too difficult to navigate, for the customers. That is to say, the customers should not have to be computer experts to purchase online. It should be easy for the consumers to find the information they look for. All users should feel convenient and welcome, when visiting a vendor's website. The Internet vendors should perhaps look at ways to make their websites adjusted also for people with disabilities. Sometimes it seems like companies want to develop a website in the easiest way possible instead of thinking about if it is easy to use. To be able to design a successful website, it is important to think like a user by trying to imagine how the site will be used and which attributes that makes it easy to use. So, one should let the users' needs decide the content of the website. To conclude, ease of use is one main factor relevant for the customers when purchasing online and for establishing trust. It is important that the Internet vendor shows concern for users' needs and also provides clues to compensate the lack of the physical experience, offered in traditional shopping.

#### 3.3.10 Comments and Summary of Factors

In this section we will give some comments and also summarize the factors we have distinguished as trust establishing factors.

To conclude, we have found that there are many factors that help establish trust, which are relevant for the customers when purchasing online. We think that trust is constantly changing, that consumers' demand on, for example, security is changing. The factors we found to be important for establishing trust in e-commerce, after reviewing literature on the subject, may not be the most important factors in the future. We believe that the focus, on which subfactors that are important to establish trust will change with time. Consumers' attitudes toward trust and their main concerns in the online environment will probably change. With this we mean that consumers may not be so concerned about credit card payment in the future. For example, Rule and Friedberg (2005) mention that today, identity theft is starting to become a major concern for online consumers. So we think that, which factors that are important for establishing trust depend to some degree on the current situation and the consumers' concerns at that time.

Furthermore, it is difficult to say what trust is for different people. How people perceive trust can be influenced by that they have different backgrounds, experiences and expectations. People perhaps have different opinions about how they value privacy. So some factors, for example convenience, are hard to define, since people might have different opinions about what convenience means to them. Thus, the level of convenience can be interpreted in different ways. A consumer's trust in an Internet vendor may be influenced by the consumer's past online experiences, since knowledge and/or experience increase the consumer's trust.

When reading the literature, we did not find much written about the variable price and how or if it affects trust. According to Nefti, Meziane and Kasiran (2005), the price of the item is an important variable. Customers seem more willing to take a higher risk and make the purchase, if the price of the item is relatively low. Perhaps customers feel more trust to purchase online, if the price of the product or service is low. With this we mean that customers might feel more trust to purchase cheaper products like books, than more expensive products like a computer or a camera. We tend to think more carefully before taking the decision to purchase an expensive product or service. We think price is a factor to include among the other trust establishing factors.

Rule and Friedberg (2005) stated that, a marketplace can be trustworthy, but the participants have to feel the trust before the marketplace can be trusted. Businesses are not able to directly control the trust their customers feel. They can just build environments that encourage people to feel trust. We think this statement gives a good view about why it is important for companies online, to build an environment that makes the consumers feel the trust. So, one can say that trust has to be experienced. We will now summarize the main factors, mentioned throughout this chapter, which help establish consumer trust in e-commerce. Under each main factor, we will also present examples through which trust can be established. We call these examples subfactors. One main factor is for example, security and the subfactors listed below this factor, are examples of things that increase the sense of security. So, these subfactors are also trust establishing. The factors form the base for our empirical research, were we want to find out the importance of some of the factors. So, this is measured through the questionnaire. Since it is impossible to include all subfactors in the questionnaire, we have selected some which we thought would be relevant and interesting to include. These are pinpointed in the list below.

#### **Security**

- Information about how security solutions work
- Updated security solutions
- Insurance solutions
- Mark or seal (certificate from third party)
- Security policy (on visible place)
- The ability to choose different payment methods
- Secure and reliable payment systems (buy safely)
- Clearly stated which third party that administers the card payment

For the questionnaire:

- Secure and reliable payment systems.
- Information about how security solutions work.
- Possibility to choose payment method (for example, invoice, cash on delivery, bank/credit card).

## <u>Privacy</u>

- Privacy policy (on visible place)
- The handling of personal information
- Guarantees that personal information is not misused or sold by the company
- Feel control over personal information (company should ask permission to get information)

For the questionnaire:

- Knowledge about how the personal information that you fill in, when ordering, is handled.
- Policy for the handling of personal information, on a visible place on the company's homepage.

## **Guarantees**

- Guarantee policy about for example, returns and refunds (on visible place)
- Order fulfilment
- Standard terms clearly stated in connection to the order form (on visible place)
- Confirmation after finished order and purchase

For the questionnaire:

- Standard terms in connection to the order form (terms for returns, refunds etc.).
- Confirmation on the order and purchase.

## **Customer Service**

- Social presence: Options to contact the company available (to get feedback and ask questions) thorough, for example, message boards, mail addresses, toll free phone numbers, customer service online. Be able to speak live to a sales representative which makes real-time interaction possible
- Show concern for consumers' needs
- Prompt answers/replies
- Show willingness to help
- Knowledgeable staff

- Discussion forums (let users share experiences and opinions)
- Make the consumers feel involved by acknowledging their opinions for improvement
- Offer online help during the order/payment process

For the questionnaire:

 Possibility to ask questions and get help directly, online or by telephone.

#### <u>Familiarity</u>

- The Brand
- Word of mouth recommendations (from other users)
- Reputation about an Internet vendor's trustworthiness (media, friends, family, trusted third parties)
- Offline reputation
- Prior relationship with the website/the vendor (Offline or online)

For the questionnaire:

- The Brand.
- Reputation / Recommendations, for example, in media, from family and friends.

#### The Website

- Clear and simple design (how the website looks)
- First impression
- Feel welcome and convenient when visiting the website

#### Functionality and Content

- Easy to navigate (should not have to be a computer expert)
- Possibility to go back and change data or exit the order process
- Understandable menu
- Understandable language
- Adjusted for people with disabilities
- Essential information in visible place
- Clues to compensate the lack of the physical experience offered in traditional shopping

#### User-friendly

- Easy to register and use technology
- Easy to use payment systems

For the questionnaire:

- Design how the website looks.
- Functionality user friendly, easy to navigate in the menus etc.

### **Information**

- Good product information
- Information that is updated, correct and easy to read
- Newsletters with advertising and information
- Information on how to avoid abusive situations and problems
- Informative and understandable website
- Understandable language
- "About us" section visible on the website (who owns the company, company size, years in business)

For the questionnaire:

 Information about the company on the website (for example, who owns the company, number of years in business etc.).

## <u>Control</u>

- Convenient/Convenience

For the questionnaire:

 That you are convenient with using the Internet and the technology – feel control.

#### **Price**

- Clearly defined actual costs (including freight)
- How much the product / service costs

#### For the questionnaire:

• The price of the product / service.

# **Chapter 4 - Empirical Method**

In this chapter the empirical method is presented. The research strategy, selection method and questionnaire design are described. The chapter ends with a discussion about validity, reliability and generalisability.

#### 4.1 Research Strategy

We chose to use a survey as our research strategy and the primary data was collected through a questionnaire. Using a questionnaire enables the collection of standardised data, which allows for easy comparison (Saunders et al., 2007). So, this data can be expressed in numbers and analysed quantitatively, by using a software program such as SPSS. The purpose with our questionnaire was to gather information about how consumers perceive the importance of different trust establishing factors. The questions in the questionnaire were based on the factors found in our literature review. Prior studies often look at consumer trust towards a specific Internet vendor and its website; however the aim with our survey is to look at consumer trust in e-commerce, in a general way. This was a short presentation of our research strategy, since we also discussed it earlier, in chapter two.

#### 4.2 Selection Method

We used convenience sampling as our selection method. Convenience sampling means that you choose only those respondents that are able to participate in the survey, after being asked (Christensen, Andersson, Carlsson & Haglund, 2001). Usually this involves choosing those cases which are easiest to obtain for your sample. The selection process continues until the required sample size is reached (Saunders et al., 2007). In our case, those respondents that agreed to answer the questionnaire were selected. We tried to ask people that did not seem to be in a hurry, since it is probably easier to get them to participate. To get a variety of respondents we tried to ask, people in various ages from 18 years and up, as well as an equal amount of men and women. We chose to ask respondents in the south of Sweden, namely in Hässleholm and Älmhult since we live there, and also in the larger city Helsingborg. We tried to find places with many people, for example, a train station. This is a good place, since people have time to answer the questionnaire while waiting for their departure.

#### 4.3 Questionnaire Design

We used different types of questions in our questionnaire (see Appendix 1, Swedish version or Appendix 2, English version). According to Saunders et al. (2007), there are different types of questions to use, depending on which data you want to collect. Below we will explain what kind of questions we used in our questionnaire. The first four questions were background questions, where question number 1 and 2 collected data about gender and age, which are attribute variables. These questions were category questions, which mean that each respondent's answer could only fit one category. Question 3 collected data about the respondent's attitude towards using the Internet to purchase products/services. This question was designed as a list question, which means that the respondent was offered a list of responses, any of which could be chosen. We used this kind of question to be sure that the respondent had considered all listed responses before choosing one. Background question 4 collected data of behavioural nature, since we asked how often the respondent shop on the Internet. This was a category question.

Question number 5 was our main question, which was going to give us the answer to our second research question. It was based on some of the trust establishing factors found in our literature review. To collect opinion data, rating questions are often used. Since we wanted to collect information about how consumers perceive the importance of each factor, for them to feel trust to purchase online, we found the Likert-style rating scale to be most suitable for this question. For each selected factor, the respondent was given the same set of alternatives. So, the respondent could fill in their opinion on a range from one to five (1= Not important at all, 2= Less

important, 3= Pretty important, 4= Important and 5= Very important). A "No opinion" alternative was also available for each factor.

All of the questions in the questionnaire were closed questions. This means that the respondent was given a number of alternative answers, from which the respondent could choose. Closed questions mean that the alternative answers are predetermined, which makes them easier to compare. Furthermore, these kinds of questions are quick and easy for the respondent to answer, since they require minimal writing. We pre-coded all of the alternative answers on the questionnaire. The coding made it possible for us to easily process and analyse the data in the software program SPSS.

Due to time constraints we were not able to conduct a pilot test of our questionnaire, but since we handed out the questionnaires in person the respondents were able to ask us directly, if they found something to be unclear. We only asked people in Sweden, therefore the questionnaire was in Swedish. So, this required that the respondents had knowledge in the Swedish language. We have translated the questionnaire into an English version (see Appendix 2), since the dissertation is in English.

#### 4.4 Validity

Validity is "concerned with whether the findings are really about what they appear to be about" (Saunders et al., 2007, p.150). It was important for us to get the right information from the questionnaire, in order to answer our second research question. It is difficult to form questions that are understandable for the respondents and at the same time provide the researchers with the right information for the purpose. We tried to construct questions that answer our research question, but even if we believe that the questions measure what we wanted them to measure, we cannot be certain. Due to time constraints we were not able to conduct a pilot test of our questionnaire and this might affect the validity. The respondents may interpret the questions were wrongly formulated and/or that the questionnaire

could not contain enough clarifications. However, these threats to validity could be reduced by the fact that we handed out the questionnaires in person and that we waited while each respondent filled out the questionnaire. This enabled them to ask us directly if something was unclear. Since we awaited each respondent's answer we had the possibility to see that the respondent was not influenced by others. So, to conclude we believe that we were able to reduce some of the threats to validity that can occur when using a questionnaire.

#### 4.5 Reliability

Reliability refers to "the extent to which your data collection techniques or analysis procedures will yield consistent findings" (Saunders et al., 2007, p.149). Reliability is about whether the measures will yield the same results on other occasions, if other researchers will reach similar results and if there is transparency in how sense was made from the raw data (Saunders et al., 2007). One threat to reliability is subject or participant error. A questionnaire handed out at different times of the week, may yield different results. Due to time constraints we had to conduct our survey during three days (Sunday, Monday and Tuesday) and these days might not have been the most appropriate days to conduct a survey on. This since, according to Saunders et al. (2007) a "neutral" time is most appropriate, meaning not in the beginning of the working week or just before the weekend. Another threat to reliability is subject or participant bias, which is about whether the respondent's answer is truthful or not. If the respondent is assured anonymity, the answers are more likely to be truthful. All the respondents of our questionnaire were anonymous and therefore we have no reason to think that their answers were untruthful. So, this can strengthen the reliability. Other threats to reliability can be observer error and observer bias. Since we used a questionnaire with standardised questions, which could only be interpreted in one way, these types of threats are not likely to occur in our case.

#### 4.6 Generalisability

Generalisability means, the ability to generalise the results to a larger population. We do not feel that we are able to assume that, our selected sample of 200 respondents is representative for the Swedish population. The generalisability of the results might also be limited geographically, since we only asked people in south of Sweden and in smaller cities. Our aim was not to generalise the results from the survey, to all Swedish consumers. We only wanted to get a better understanding on the subject. However, we also believe that Swedish consumers do not differ so much from each other and therefore the result could be generalised to some degree.

# **Chapter 5 - Analysis of the Survey**

In this chapter the survey is analysed. First, the results of the questionnaire are presented and then the chapter ends with a discussion of the results.

#### 5.1 Introduction

Our research strategy was to conduct a survey, by using questionnaires, to collect our primary data. The purpose with our questionnaire was to gather information about how consumers perceive the importance of specific factors, for them to feel trust to purchase online. The questions in the questionnaire were based on some of the factors found in our literature review. We handed out the questionnaires in person and since we used convenience sampling, we continued the selection process until we reached our required sample size of 200 responses. The data we collected through the questionnaire was quantitative, which enabled us to process and analyse it by using the software program SPSS. The questionnaire can be found in Appendix 1 (in Swedish) and Appendix 2 (in English). In the following sections, we will present and discuss the results of the questionnaire.

#### 5.2 Questionnaire Data

#### 5.2.1 Questions 1, 2, 3 and 4

These questions served as background questions, asked to get some information about the respondent's gender, age, attitude towards purchasing online and experience of shopping online. Below, we will present and examine the results of these questions.

#### 1. Gender

Table  $5.1^1$ , on the next page, shows the distribution of male and female respondents in the survey. We wanted to include gender in our survey, to examine whether there are any differences in how males and females

<sup>&</sup>lt;sup>1</sup> The software program SPSS (used when creating the tables) automatically uses a comma instead of a dot in the figures.

perceive the importance of the factors. This will be examined later on in the chapter, under heading 5.3 Discussion about the results of the survey.

|       |        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|--------|-----------|---------|---------------|-----------------------|
| Valid | Male   | 118       | 59,0    | 59,0          | 59,0                  |
|       | Female | 82        | 41,0    | 41,0          | 100,0                 |
|       | Total  | 200       | 100,0   | 100,0         |                       |

Table 5.1 Q1. Gender Distribution

There was a majority of male respondents, 59% compared to 41% female respondents. One reason for the majority of male respondents might be because we tried to ask people that did not seem to be in a hurry, both men and women, and the male respondents were more willing to take a minute to fill out the questionnaire.

#### 2. <u>Age</u>

Table 5.2 shows the distribution of the respondents according to different age groups. We wanted to include age in our survey, to later on in the chapter (under heading 5.3), examine whether there are any differences in how people of different ages perceive the importance of the factors.

|       |       | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | 18-29 | 63        | 31,5    | 31,5          | 31,5                  |
|       | 30-39 | 55        | 27,5    | 27,5          | 59,0                  |
|       | 40-49 | 36        | 18,0    | 18,0          | 77,0                  |
|       | 50-59 | 35        | 17,5    | 17,5          | 94,5                  |
|       | 60 -  | 11        | 5,5     | 5,5           | 100,0                 |
|       | Total | 200       | 100,0   | 100,0         |                       |

Table 5.2 Q2. Distribution according to Age

As can be seen, the respondents in the age groups 18-29 and 30-39, together constitute 59% of the total amount of respondents. It should also be noted that only 5.5% of the respondents were in the age 60 and up. We noticed that the older people became reluctant towards answering, just by hearing the words Internet and e-commerce. Many of them said that they do not use the Internet. They were reluctant to answer, even though we explained that the questions in our questionnaire did not require the respondent to have access to or experience of the Internet and e-commerce.

**3.** <u>Which attitude do you have towards using the Internet, to purchase products/services?</u>

Table 5.3 shows the respondents' attitudes towards using the Internet as a shopping means. We gave three pre-set alternatives (Positive, Negative and No opinion) for the respondents to choose from. As we mentioned in our theoretical framework, the consumer's perceptions of shopping convenience mirror his or her attitude towards online shopping. This can be measured by the extent to which the Internet is accepted by the consumer, as a new shopping place and how useful it is (Chen & Dhillon, 2003). So, this is the background to why we asked this question.

|       |            |           |         |               | Cumulative |
|-------|------------|-----------|---------|---------------|------------|
|       |            | Frequency | Percent | Valid Percent | Percent    |
| Valid | Positive   | 124       | 62,0    | 62,0          | 62,0       |
|       | Negative   | 41        | 20,5    | 20,5          | 82,5       |
|       | No opinion | 35        | 17,5    | 17,5          | 100,0      |
|       | Total      | 200       | 100,0   | 100,0         |            |

Table 5.3 Q3. The Respondents' Attitudes

The majority of respondents, 62%, had a positive attitude, while 17.5%, had no opinion in the matter. This shows that people have different attitudes about the use of the Internet and new technologies. We think that, since 59% of the respondents were in the ages 18 to 39, this might have influenced the result on this question. We believe that people in these age groups, are perhaps more positive towards the Internet and e-commerce. To conclude, the majority of positive attitudes show that the Internet is a relatively accepted means for shopping.

#### 4. <u>How often do you shop on the Internet?</u>

Table 5.4, on the next page, shows how often the respondents shop online. It can be noted that we included the alternative "Never", since we cannot assume that all the respondents have shopped on the Internet. According to Chen and Dhillon (2003), a consumer's trust in an Internet vendor may be influenced by the consumer's past online and e-store experiences, since knowledge and/or experience can lead to an increased assessment of an Internet vendor's trustworthiness. This influenced us to ask a question that

would give us an idea about the respondents' online experience, since this might affect their perception of the importance of the selected trust establishing factors.

|       |                             | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-----------------------------|-----------|---------|---------------|-----------------------|
| Valid | Never                       | 61        | 30,5    | 30,5          | 30,5                  |
|       | 1-2 times per year          | 62        | 31,0    | 31,0          | 61,5                  |
|       | More than 2 times per year  | 59        | 29,5    | 29,5          | 91,0                  |
|       | 1-2 times per month         | 11        | 5,5     | 5,5           | 96,5                  |
|       | More than 2 times per month | 7         | 3,5     | 3,5           | 100,0                 |
|       | Total                       | 200       | 100,0   | 100,0         |                       |

Table 5.4 Q4. The Respondents' Purchase Behaviour

A majority of the respondents, 69.5%, have experience of shopping online. Of the respondents with experience of shopping online, a majority purchase on a yearly basis and only a few purchase as frequently as every month. The remaining 30.5% answered that they never shop on the Internet and therefore have no experience. Later on in this chapter (under heading 5.3), we will analyse if there are any differences in how the respondents perceive the importance of the different factors, depending on their level of experience of shopping online.

#### 5.2.2 Question 5

**5.** If you have purchased / would purchase on the Internet, <u>how important</u> are the following factors for you to feel trust to purchase on the Internet? This was the main question in our questionnaire, which was going to provide us with the answer to our second research question. As Rule and Friedberg (2005) stated, participants have to feel the trust before the marketplace can be trusted. The main factors and the subfactors, selected to be included in the questionnaire, were presented in the end of our theoretical framework. The main factors, important for establishing trust online, were:

- Security
- The Website
- Privacy
- Information
- Guarantees
- Control - Price
- Customer Service Familiarity
- Price

Below we will present the responses, on question 5, for each of the selected subfactors. The responses on each subfactor will be presented in the same order as they appear on the questionnaire (see Appendix 1 or 2). For all subfactors, the respondents were asked to answer on a scale from 1-5 (1=Not important at all, 2= Less important, 3= Pretty important, 4= Important and 5= Very important). The alternative "No opinion" was also available. We will show frequency tables for each factor and shortly comment on the distribution of answers. We will conclude this presentation with a discussion of the answers, under heading 5.3.

#### a. Security

Tables 5.5 - 5.7 shows how important the respondents perceived these subfactors to be, for them to feel trust to purchase online.

- Secure and reliable payment systems.

|       |                      | <u>1 adie 5.5 (</u> | 25a. Securi | ly            |            |
|-------|----------------------|---------------------|-------------|---------------|------------|
|       |                      | -                   | <b>D</b> ,  |               | Cumulative |
|       |                      | Frequency           | Percent     | Valid Percent | Percent    |
| Valid | Not important at all | 1                   | ,5          | ,5            | ,5         |
|       | Pretty important     | 6                   | 3,0         | 3,0           | 3,5        |
|       | Important            | 7                   | 3,5         | 3,5           | 7,0        |
|       | Very important       | 181                 | 90,5        | 90,5          | 97,5       |
|       | No opinion           | 5                   | 2,5         | 2,5           | 100,0      |
|       | Total                | 200                 | 100,0       | 100,0         |            |

Table 5.5 Q5a. Security

As can be seen in the table, the vast majority of the respondents, 90.5%, perceived secure and reliable payment systems to be very important.

• Information about how security solutions work.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 1         | ,5      | ,5            | ,5                    |
|       | Less important       | 2         | 1,0     | 1,0           | 1,5                   |
|       | Pretty important     | 12        | 6,0     | 6,0           | 7,5                   |
|       | Important            | 30        | 15,0    | 15,0          | 22,5                  |
|       | Very important       | 143       | 71,5    | 71,5          | 94,0                  |
|       | No opinion           | 12        | 6,0     | 6,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.6 Q5a. Security

71.5% of the respondents perceived this subfactor to be very important. This percentage shows a great majority, although it is not as high as the percentage for very important, on the previous factor.

• Possibility to choose payment method (for example, invoice, cash on delivery, bank/credit card).

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 1         | ,5      | ,5            | ,5                    |
|       | Less important       | 1         | ,5      | ,5            | 1,0                   |
|       | Pretty important     | 9         | 4,5     | 4,5           | 5,5                   |
|       | Important            | 53        | 26,5    | 26,5          | 32,0                  |
|       | Very important       | 132       | 66,0    | 66,0          | 98,0                  |
|       | No opinion           | 4         | 2,0     | 2,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

 Table 5.7 Q5a. Security

This table shows that, 66% of the respondents thought that it is very important to have the possibility to choose payment method. Here, a great majority of the responses are on the alternatives "Important" and "Very Important".

#### b. Privacy

Tables 5.8 - 5.9 shows how important the respondents perceived these subfactors to be, for them to feel trust to purchase online.

• Knowledge about how the personal information that you fill in, when ordering, is handled.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 4         | 2,0     | 2,0           | 2,0                   |
|       | Less important       | 1         | ,5      | ,5            | 2,5                   |
|       | Pretty important     | 12        | 6,0     | 6,0           | 8,5                   |
|       | Important            | 35        | 17,5    | 17,5          | 26,0                  |
|       | Very important       | 144       | 72,0    | 72,0          | 98,0                  |
|       | No opinion           | 4         | 2,0     | 2,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.8 Q5b. Privacy

A majority of 72% thought that it is very important to know how their personal information is handled.

• Policy for the handling of personal information, on a visible place on the company's homepage.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 3         | 1,5     | 1,5           | 1,5                   |
|       | Less important       | 1         | ,5      | ,5            | 2,0                   |
|       | Pretty important     | 10        | 5,0     | 5,0           | 7,0                   |
|       | Important            | 45        | 22,5    | 22,5          | 29,5                  |
|       | Very important       | 135       | 67,5    | 67,5          | 97,0                  |
|       | No opinion           | 6         | 3,0     | 3,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.9 Q5b. Privacy

Here 67.5% responded "Very important" and 22.5% responded "Important". So, a clearly stated privacy policy is of great importance for the respondents to feel trust.

#### c. Guarantees

Tables 5.10 - 5.11 shows how important the respondents perceived these subfactors to be, for them to feel trust to purchase online.

• Standard terms in connection to the order form (terms for returns, refunds etc.).

| -     |                      |           |         |               |            |  |
|-------|----------------------|-----------|---------|---------------|------------|--|
|       |                      |           |         |               | Cumulative |  |
|       |                      | Frequency | Percent | Valid Percent | Percent    |  |
| Valid | Not important at all | 2         | 1,0     | 1,0           | 1,0        |  |
|       | Pretty important     | 7         | 3,5     | 3,5           | 4,5        |  |
|       | Important            | 54        | 27,0    | 27,0          | 31,5       |  |
|       | Very important       | 133       | 66,5    | 66,5          | 98,0       |  |
|       | No opinion           | 4         | 2,0     | 2,0           | 100,0      |  |
|       | Total                | 200       | 100,0   | 100,0         |            |  |

Table 5.10 Q5c. Guarantees

This table shows that, again a majority of respondents answered "Very important" and 27% answered that it is important.

• Confirmation on the order and purchase.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 2         | 1,0     | 1,0           | 1,0                   |
|       | Less important       | 1         | ,5      | ,5            | 1,5                   |
|       | Pretty important     | 11        | 5,5     | 5,5           | 7,0                   |
|       | Important            | 55        | 27,5    | 27,5          | 34,5                  |
|       | Very important       | 128       | 64,0    | 64,0          | 98,5                  |
|       | No opinion           | 3         | 1,5     | 1,5           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.11 Q5c. Guarantees

The distribution of answers in this table is similar to table 5.10 for standard terms. This shows that the respondents perceive these two subfactors as equally important.

#### d. Customer Service

Table 5.12 shows how important the respondents perceived this subfactor to be, for them to feel trust to purchase online.

• Possibility to ask questions and get help directly, online or by telephone.

|       |                  | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|------------------|-----------|---------|---------------|-----------------------|
| Valid | Less important   | 3         | 1,5     | 1,5           | 1,5                   |
|       | Pretty important | 14        | 7,0     | 7,0           | 8,5                   |
|       | Important        | 71        | 35,5    | 35,5          | 44,0                  |
|       | Very important   | 110       | 55,0    | 55,0          | 99,0                  |
|       | No opinion       | 2         | 1,0     | 1,0           | 100,0                 |
|       | Total            | 200       | 100,0   | 100,0         |                       |

Table 5.12 Q5d. Customer Service

The majority, 55%, answered "Very important". Here we can see that, compared to the subfactors under security and privacy, the majority of responses for very important is not so superior.

#### e. Familiarity

Tables 5.13 - 5.14 shows how important the respondents perceived these subfactors to be, for them to feel trust to purchase online.

The Brand

|       |                      |           |         |               | Cumulative |
|-------|----------------------|-----------|---------|---------------|------------|
|       |                      | Frequency | Percent | Valid Percent | Percent    |
| Valid | Not important at all | 2         | 1,0     | 1,0           | 1,0        |
|       | Less important       | 9         | 4,5     | 4,5           | 5,5        |
|       | Pretty important     | 36        | 18,0    | 18,0          | 23,5       |
|       | Important            | 77        | 38,5    | 38,5          | 62,0       |
|       | Very important       | 73        | 36,5    | 36,5          | 98,5       |
|       | No opinion           | 3         | 1,5     | 1,5           | 100,0      |
|       | Total                | 200       | 100,0   | 100,0         |            |

**Table 5.13** Q5e. Familiarity

Here we can notice a difference in the distribution of answers. Of the respondents, 38.5% have responded "Important" and this is the majority. However, several respondents (36.5%) answered that they perceive the brand to be a very important factor. Compared to previous factors, the number of respondents that answered "Pretty important" (18%) has increased.

• Reputation / Recommendations, for example, in media, from family and friends.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 3         | 1,5     | 1,5           | 1,5                   |
|       | Less important       | 11        | 5,5     | 5,5           | 7,0                   |
|       | Pretty important     | 34        | 17,0    | 17,0          | 24,0                  |
|       | Important            | 77        | 38,5    | 38,5          | 62,5                  |
|       | Very important       | 69        | 34,5    | 34,5          | 97,0                  |
|       | No opinion           | 6         | 3,0     | 3,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.14 Q5e. Familiarity

The distribution of answers in this table is similar to table 5.13 for the brand. The majority of respondents, 38.5%, answered "Important".

#### f. The Website

Tables 5.15 - 5.16 shows how important the respondents perceived these subfactors to be, for them to feel trust to purchase online.

• Design – how the website looks.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 4         | 2,0     | 2,0           | 2,0                   |
|       | Less important       | 35        | 17,5    | 17,5          | 19,5                  |
|       | Pretty important     | 55        | 27,5    | 27,5          | 47,0                  |
|       | Important            | 57        | 28,5    | 28,5          | 75,5                  |
|       | Very important       | 39        | 19,5    | 19,5          | 95,0                  |
|       | No opinion           | 10        | 5,0     | 5,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.15 Q5f. The Website

Here the answers are more evenly dispersed between the alternatives. A majority of the respondents answered "Important" and "Pretty important". On this factor, we can notice a greater change of the distribution of answers, than for the previous factors. Not so many respondents perceived the design to be very important.

• Functionality – user friendly, easy to navigate in the menus etc.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 2         | 1,0     | 1,0           | 1,0                   |
|       | Less important       | 1         | ,5      | ,5            | 1,5                   |
|       | Pretty important     | 20        | 10,0    | 10,0          | 11,5                  |
|       | Important            | 76        | 38,0    | 38,0          | 49,5                  |
|       | Very important       | 93        | 46,5    | 46,5          | 96,0                  |
|       | No opinion           | 8         | 4,0     | 4,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.16 Q5f. The Website

Functionality is perceived as very important, by a majority of the respondents (46.5%) and 38% perceived it as important. However, the majority of responses for very important, is not so great.

#### g. Information

Table 5.17 shows how important the respondents perceived this subfactor to be, for them to feel trust to purchase online.

• Information about the company on the website (for example, who owns the company, number of years in business etc.).

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 2         | 1,0     | 1,0           | 1,0                   |
|       | Less important       | 37        | 18,5    | 18,5          | 19,5                  |
|       | Pretty important     | 49        | 24,5    | 24,5          | 44,0                  |
|       | Important            | 53        | 26,5    | 26,5          | 70,5                  |
|       | Very important       | 51        | 25,5    | 25,5          | 96,0                  |
|       | No opinion           | 8         | 4,0     | 4,0           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.17 Q5g. Information

As in table 5.15, about the design of the website, the answers are more evenly dispersed between the alternatives. The percentages for the alternatives pretty important, important and very important, are almost the same for all three.

#### h. Control

Table 5.18 shows how important the respondents perceived this subfactor to be, for them to feel trust to purchase online.

• That you are convenient with using the Internet and the technology – feel control.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 1         | ,5      | ,5            | ,5                    |
|       | Less important       | 5         | 2,5     | 2,5           | 3,0                   |
|       | Pretty important     | 19        | 9,5     | 9,5           | 12,5                  |
|       | Important            | 84        | 42,0    | 42,0          | 54,5                  |
|       | Very important       | 84        | 42,0    | 42,0          | 96,5                  |
|       | No opinion           | 7         | 3,5     | 3,5           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.18 Q5h. Control

The same amount of respondents, 42%, has answered "Important" and "Very important". It is important for most of the respondents to feel

convenient with using the Internet and new technology, meaning feeling control.

#### i. Price

Table 5.19 shows how important the respondents perceived this subfactor to be, for them to feel trust to purchase online.

• The price of the product / service.

|       |                      | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|----------------------|-----------|---------|---------------|-----------------------|
| Valid | Not important at all | 3         | 1,5     | 1,5           | 1,5                   |
|       | Less important       | 5         | 2,5     | 2,5           | 4,0                   |
|       | Pretty important     | 10        | 5,0     | 5,0           | 9,0                   |
|       | Important            | 57        | 28,5    | 28,5          | 37,5                  |
|       | Very important       | 120       | 60,0    | 60,0          | 97,5                  |
|       | No opinion           | 5         | 2,5     | 2,5           | 100,0                 |
|       | Total                | 200       | 100,0   | 100,0         |                       |

Table 5.19 Q5i. Price

Here a great majority of the respondents, 60%, answered that the price was a very important factor.

#### 5.3 Discussion about the results of the survey

We have now reviewed the respondents' answers on question 5, on how important different subfactors were for them to feel trust to purchase online. This question enables us to see if there are any differences in how important the different factors are perceived to be. We were able to distinguish some factors that the respondents perceived as more important. As mentioned in the introduction chapter, security and privacy issues are often seen as barriers to shopping online. We can see from the results in our survey that the subfactors under security as well as under privacy, gained high percentage of responses on the alternative "Very important". This shows that security and privacy are factors that are of great importance for the consumers to feel trust, to purchase online. The subfactor secure and reliable payment systems received the highest percentage, of all the subfactors, on the alternative "Very important. As mentioned in the subfactor to be very important. As we have mentioned in the

theory, it is important for the consumers to feel secure about not being exposed to fraud or that the money disappears due to technical problems. So, safety is a major concern for many consumers. Other factors that gained high percentages, above 50%, on the alternative "Very important" were the subfactors under guarantees, customer service and price. To conclude, many consumers think it is important that the Internet vendor provides information about standard terms. It is also important for them to get a confirmation on their order and purchase. Furthermore, it is important that the Internet vendor provides good customer service, by offering the customers help and support online. The price was also perceived as very important. This might show, as we mentioned before in the theoretical chapter under comments, that the price influence the decision whether to take the step to purchase online. Consumers might feel more trust to purchase online if the price of the product or service is low. The subfactor functionality was also perceived as important. The subfactor under information and the subfactor website design were not perceived as so important for the consumers to feel trust. After reviewing the literature we found that information was mentioned as an important factor for establishing trust. However, this factor did not receive so many answers on very important in our study. As mentioned earlier in the theoretical chapter, Hansen (2005) claims that the average online buyer does not pay so much attention to the brand. It is more important how the website looks and works. Our study differed somewhat from what Hansen claims. In our study the brand was perceived to be more important than how the website looks, which is the opposite from what Hansen says. However, functionality, meaning how the website works, was perceived as more important than the brand.

The level of trust needed to take the step and engage in online transactions is different for each individual. As we mentioned earlier in this chapter, we included gender, age and respondents' purchase behaviour in our survey to examine whether there are any differences in how the respondents perceive the importance of the factors depending on these variables. From the data we collected, we also calculated the mean values for how the respondents had answered on each subfactor depending on gender (see Appendix 3, Table of the mean values). The higher the mean value for a subfactor, the more important the factor was perceived to be. The mean value for male and female answers were quite similar, but when it comes to privacy we noticed that females perceive this factor as somewhat more important than males. This, can indicate that females are a bit more concerned about providing personal information, without knowing how it is handled.

As we mentioned above, we also included age in our survey to examine whether there are any differences in how people of different ages perceive the importance of the factors. When we looked at the mean values for the respondents' answers on the different subfactors according to the age groups (see Appendix 4, Table of the mean values), we found that overall the mean values in the age group 18-29 were the lowest. One reason for the lower mean values can be that younger people are more familiar with using the Internet and also shopping online. The fact that they are familiar with the online environment make them more secure and perhaps therefore, do not value the importance of the trust factors as high as someone with limited or no experience of the online environment. When examining the mean values further, we saw a tendency that the mean value for each subfactor gradually increased from the age group 30-39 to 40-49 and so on. The respondents in the age group 60 and over received the highest mean values on each subfactor. It is possible to assume, that since the respondents in this age group seemed very reluctant and insecure towards using the Internet and purchasing online, they value the importance of each factor higher than the other age groups. This might also indicate that they are very insecure about using new technologies.

The consumer's perceptions of shopping convenience mirror his or her attitude towards online shopping. This can be measured by the extent to which the Internet is accepted by the consumer as a new shopping place and how useful it is. The results of our study show that a majority of the respondents have a positive attitude towards using the Internet as a shopping means. As mentioned under question 3, the fact that 59% of the respondents were in the ages 18 to 39 may have influenced the result on this question.

As mentioned earlier, the consumer's trust in an Internet vendor may be influenced by the consumer's past online experiences, since knowledge and experience can lead to an increased view of an Internet vendor's trustworthiness. This influenced us to ask a question that would give us an idea about the respondents' online experience, since this might affect their perception of the importance of the selected trust establishing factors. Our study revealed that those respondents, who have never shopped online, got relatively high mean values on several subfactors (see Appendix 5, Table of the mean values). This perhaps, since they are more concerned and have higher expectations on what is needed to make them feel trust to purchase online. The subfactors under security and privacy were perceived as most important for these respondents to feel trust, to purchase online. Another group that received high mean values were the respondents that shopped more than 2 times a month. This surprised us a little, since we thought that due to the fact that they are more experienced, they would not value the importance of the different subfactors as high as they did. We thought that the respondents that shop 1-2 times a year, would perceive the factors to be more important than more experienced shoppers did. The fact that the respondents that shopped more than 2 times a month received high mean values, somewhat contradicts what Chen and Dhillon (2003) states, which we mentioned earlier. According to them knowledge and/or experience can lead to an increased assessment of an Internet vendor's trustworthiness.

To conclude, our purpose with the survey was not to build any new theory or model, but to get a better understanding of how consumers perceive the importance of specific factors, for them to feel trust to purchase online. With this chapter, we have answered our second research question.

## **Chapter 6 – Conclusions**

In this final chapter the dissertation is summarised. We criticize our work and finally, practical implications and suggestions for future research are discussed.

#### 6.1 Summary of the Dissertation

An often mentioned reason for consumers not purchasing from Internet vendors, is the lack of trust. Thus, there is a need for promoting trust and confidence on the Internet. Trust is an essential tool for a transaction to take place, both in an online and offline environment. Trust is multi-dimensional and difficult to define. The level of trust needed to take the step and engage in online transactions is different for each individual. It is difficult to say what trust is for different people. How people perceive trust can be influenced by that they have different backgrounds, experiences and expectations. In e-commerce, the Internet vendors as well as their websites can be trust-building sources in themselves. So, it is important for companies to learn how to manage consumers' trust in e-commerce. Although, building consumer trust on the Internet is a challenge for online vendors.

The potential risk in e-commerce is greater because of the anonymity, distance and lack of physical interactions. Physical clues in the traditional shopping environment, such as the appearance of the store and the direct contact with sales persons that affect consumers sense of trust, are absent in the online environment. This lack of physical clues and physical interaction in the online environment, make it more difficult to establish trust with the consumers. So, this constitutes a major challenge for companies that engage in e-commerce. Therefore, it is important to find factors that help to establish consumer trust in e-commerce. Businesses are not able to directly control the trust their customers feel. They can just build environments that encourage people to feel trust. A marketplace can be trustworthy, but the

participants have to feel the trust before the marketplace can be trusted. We found it interesting to find out which factors are important for establishing consumer trust in the online shopping environment. The purpose with this dissertation was to get a better understanding of consumer trust in ecommerce. By reviewing relevant literature on consumer trust in ecommerce, we aimed to find important factors that help to establish trust online. From these we selected some specific factors that guided our empirical research, where we intended to investigate how consumers perceive the importance of the selected factors, for them to feel trust to purchase online.

Conducting a survey in form of a questionnaire seemed like the most appropriate strategy to be able to get a picture of consumers' opinions in the matter. The purpose with the questionnaire was to gather information about how consumers perceive the importance of different trust factors. The questions in the questionnaire were based on the factors found in our literature review. Many previous studies look at consumer trust towards a specific Internet vendor and its website, but the aim with our survey was to look at consumer trust in e-commerce in general.

We have found that there are many factors that help establish trust, which are relevant for the customers when purchasing online. We think that, which factors that are important for establishing trust depend to some degree on the current situation and consumers' concerns at that time. Security and privacy issues are often seen as barriers to shopping online. We were able to see from the results in our survey that the subfactors under security, as well as under privacy, gained high percentage of responses on the alternative "Very important". This showed that security and privacy are factors that are of great importance for the consumers to feel trust, to purchase online. The factors, information and website design were not perceived as so important for the consumers to feel trust. To conclude, the purpose with our dissertation was not to build any new theory or model, but to get a better understanding of consumer trust in e-commerce.

#### 6.2 Self-Criticism

One thing we can criticize is that we did not do a pilot-test of our questionnaire before using it. Conducting such a test would have made it possible for us to see if our questionnaire was understandable. Since we were not able to do this test, this may have affected the results of the survey. However, since we handed the questionnaires out in person and were present when the respondents filled it out, they had the opportunity to ask if something was unclear.

Another criticism is that we only used frequency tables to present the results of our survey. Perhaps the use of diagrams would have made the results easier to view. Due to time constraints, we made the choice to use tables instead.

A third criticism can be that it might have been easier to distinguish the importance of the factors by using a ranking method. With this method all the factors would be presented and the respondents would be asked to rank the factors from 1 and up, according to how they perceive the importance of each factor in relation to the other factors.

Furthermore, it can be criticised that we did not statistically measure, if there were any possible correlations between different factors. Due to time constraints, we were not able to do this.

#### **6.3 Practical Implications**

Based on our study and the knowledge gained in the process of writing our dissertation, our findings can provide some practical implications to companies. The different factors important for establishing trust in e-commerce that we found in our research, can be helpful to companies. The factors constitute tools and techniques, which companies can adopt and implement to become better at serving the consumers' needs when it comes to establishing trust.

#### 6.4 Future Research

Here follows some suggestions for future research:

• One possibility for future research is to conduct the same survey, but with a larger sample to be able to generalise the findings. Also the survey could be conducted in other parts of Sweden. Since we conducted our survey in rather small cities, in the south of Sweden, a survey conducted at other locations would perhaps show a different result.

• Since both e-commerce and trust are areas in constant change, it could be interesting to see if a research as ours would yield the same results in five to ten years from now. People's perceptions of trust in e-commerce will most likely change as e-commerce will become even more integrated into people's lives. Will the same factors for establishing trust that are important today, be as important in the future?

• An interesting aspect to look at, in connection with consumer trust in ecommerce, is culture. Do people from different cultures emphasize different trust establishing factors? Can any differences be distinguished and if so, why?

• In our research the focus has been on consumer trust in e-commerce. However, online trust is a relevant aspect for other parties as well, for example, employees, suppliers and distributors. One recommendation is to shift the focus to one of these parties and see if it might result in different kinds of trust establishing factors.

• One further suggestion for future research is to go out and ask companies that engage in e-commerce how they have managed to handle the challenge of establishing consumer trust online.

• A lot of online companies today are segmenting their customers after which kind of shoppers they are. For example, consumers can be convenience shoppers, comparison shoppers or brand loyal shoppers. It could be interesting to investigate if different kinds of shoppers emphasize different trust establishing factors.

#### Books

Christensen, L., Andersson, N., Carlsson, C. & Haglund, L. (2001). *Marknadsundersökning – En handbok*. 2<sup>nd</sup> ed. Lund: Studentlitteratur.

Hansen, J. (2005). 100 sidor: Om att starta, driva och marknadsföra en butik på nätet. Stockholm: Redaktionen.

Hutt, M.D. & Speh, T.W. (2004). Business Marketing Management – A Strategic View of Industrial and Organizational Markets. 8<sup>th</sup> ed. Mason, Ohio: Thomson South-Western.

Loshin, P. & Murphy, P. (1997). *Electronic commerce – On-line Ordering and Digital Money*. 2<sup>nd</sup> ed. Rockland, Massachusetts: Charles River Media, Inc.

Petrovic, O., Ksela, M., Fallenböck, M. & Kittl, C. (2003). *Trust in the Network Economy*. Vol. 2. Wien: Springer-Verlag Wien New York.

Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*. 4<sup>th</sup> ed. England: FT Prentice Hall.

Slevin, J. (2000). The Internet and Society. Cambridge: Polity Press.

SOU - Statens offentliga utredningar, (1999:106). *Konsumenterna och IT – en utredning om datorer, handel och marknadsföring*. Stockholm: Norstedts Tryckeri.

Windham, L. & Orton, K. (2000). *The Soul of the New Consumer – The Attitudes, Behaviors, and Preferences of e-customers*. New York: Allworth Press.

#### Articles

Cazier, J.A., Shao, B.B.M. & St. Louis, R.D. (2006). E-business differentiation through value-based trust. *Information & Management*, 43:718-727.

Chen, S.C. & Dhillon, G.S. (2003). Interpreting Dimensions of Consumer Trust in E-Commerce. *Information Technology and Management*, 4:303-318.

Gefen, D. & Straub, D. (2003). Managing User Trust in B2C e-Services. *e-Service Journal*, 7-24.

Grabner-Kräuter, S. & Kaluscha, E.A. (2003). Empirical research in on-line trust: a review and critical assessment. *Int. J. Human-Computer Studies*, 58:783-812.

Nefti, S., Meziane, F. & Kasiran, K. (2005). A Fuzzy Trust Model for E-Commerce. *Proceedings of the Seventh IEEE International Conference on E-Commerce Technology (CEC'05)*.

Rule, C. & Friedberg, L. (2005). The appropriate role of dispute resolution in building trust online. *Artificial Intelligence and Law*, 13:193-205.

Shoniregun, C.A., Omoegun, A., Brown-West, D. & Logvynovskiy, O. (2004). Can eCRM and Trust improve eC customer base?. *Proceedings of the IEEE International Conference on E-Commerce Technology*.

Tan, Y-H. & Thoen, W. (2000). A Logical Model of Trust in Electronic Commerce. *Electronic markets*, Vol. 10(4):258-263.

Wang, Y.D. & Emurian, H.H. (2005). An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior*, 21:105-125.

#### Internet

E-Business, eEurope. (n.d). Retrieved October 13, 2006, from <u>http://www.e-</u> europestandards.org/Docs/E-Business%20to%20press.pdf

E-Business Research Center. February 01, 2006. *The ABCs of E-Commerce*. Retrieved October 13, 2006, from <u>http://www.cio.com/ec/edit/b2cabc.html</u>

Internet World Stats – Usage and Population Statistics. September 18, 2006. *World Internet Users and Population Stats*. Retrieved November 13, 2006, from <u>http://www.internetworldstats.com/stats.htm</u>

Internet World Stats – Usage and Population Statistics. September 18, 2006. Internet User Statistics & Population for the 25 European Union countries and regions. Retrieved November 13, 2006, from http://www.internetworldstats.com/stats9.htm

WikiBooks. November 1, 2006. *E-commerce and E-business/Concepts and Definitions*. Retrieved November 4, 2006, from <a href="http://en.wikibooks.org/wiki/E-Commerce\_and\_E-Business/Concepts">http://en.wikibooks.org/wiki/E-Commerce\_and\_E-Business/Concepts</a> and Definitions

#### Appendix 1. The Questionnaire in Swedish

Högskolan Kristianstad - Internationella Civilekonomprogrammet

#### Enkätundersökning om: FÖRTROENDE FÖR E-HANDEL

Vänligen kryssa för det alternativ som stämmer in på dig

**1.**  $\operatorname{\ddot{A}r}$  du... Man  $\Box_0$  Kvinna  $\Box_1$ 

**2.** Ålder: 18-29 år  $\Box_1$  30-39 år  $\Box_2$  40-49 år  $\Box_3$  50-59 år  $\Box_4$  60 år -  $\Box_5$ 

**3.** Vilken inställning har du till att använda Internet för att handla varor/tjänster?

Positiv  $\Box_1$  Negativ  $\Box_2$  Ingen åsikt  $\Box_3$ 

4. Hur ofta handlar du via Internet?

Aldrig  $\Box_1$  1-2 gånger per år  $\Box_2$  Mer än 2 gånger per år  $\Box_3$ 

1-2 gånger per månad  $\Box_4$  Mer än 2 gånger per månad  $\Box_5$ 

5. Om du har handlat / skulle handla på Internet, <u>hur viktiga</u> är följande faktorer för att du ska <u>känna förtroende</u> för att handla på Internet?

#### a. <u>Säkerhet</u>

Säkra och pålitliga betalningssystem.

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\Box_5$       | $\Box_6$    |

• Information om hur säkerhetslösningar fungerar.

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\square_5$    | $\Box_6$    |

• Möjlighet att välja betalningssätt (till exempel faktura, postförskott, bank/kontokort).

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\square_5$    | $\square_6$ |

#### b. Personliga uppgifter

• Kännedom om hur de personliga uppgifter du fyller i, vid beställning, hanteras.

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\square_5$    | $\square_6$ |

• Policy för hantering av personliga uppgifter, på synlig plats på företagets hemsida.

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt     | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|-------------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\square_4$ | $\square_5$    | $\square_6$ |

## c. <u>Garantier</u>

• Standardvillkor i anslutning till beställningsformulär (villkor för returer, öppet köp m.m.).

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\square_5$    | $\Box_6$    |
|                   |                |                |          |                |             |

Bekräftelse på beställning och köp.

Inte alls viktigtMindre viktigtGanska viktigtViktigtMycket viktigtIngen åsikt $\Box_1$  $\Box_2$  $\Box_3$  $\Box_4$  $\Box_5$  $\Box_6$ 

#### d. <u>Kundservice</u>

• Möjlighet att kunna ställa frågor och få hjälp direkt, online eller via telefon.

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\Box_5$       | $\Box_6$    |

#### e. <u>Kännedom om företaget</u>

• Varumärket.

| Inte alls viktigt $\Box_1$         | Mindre viktigt $\Box_2$    | Ganska viktigt $\Box_3$ | Viktigt $\Box_4$    | Mycket viktigt | Ingen åsikt<br>D <sub>6</sub> |
|------------------------------------|----------------------------|-------------------------|---------------------|----------------|-------------------------------|
| <ul> <li>Rykte / Rekord</li> </ul> | mmendationer, t            | .ex. i media, från      | familj och v        | vänner.        |                               |
| Inte alls viktigt $\Box_1$         | Mindre viktigt $\square_2$ | Ganska viktigt $\Box_3$ | Viktigt $\Box_4$    | Mycket viktigt | Ingen åsikt                   |
| f. <u>Webbsidan</u>                |                            |                         |                     |                |                               |
| • Design - hur v                   | webbsidan ser ut           |                         |                     |                |                               |
| Inte alls viktigt $\Box_1$         | Mindre viktigt $\square_2$ | Ganska viktigt $\Box_3$ | Viktigt $\square_4$ | Mycket viktigt | Ingen åsikt<br>D <sub>6</sub> |
| Funktionalite                      | t – användarvänl           | ig, lätt att hitta i r  | nenyer m.m          | 1.             |                               |
| Inte alls viktigt $\Box_1$         | Mindre viktigt $\square_2$ | Ganska viktigt $\Box_3$ | Viktigt $\square_4$ | Mycket viktigt | Ingen åsikt<br>□ <sub>6</sub> |
| g. <u>Information</u>              | <u>l</u>                   |                         |                     |                |                               |

• Företagsinformation på hemsidan (t.ex. vem som äger företaget, antal verksamma år m.m.).

| Inte alls viktigt | Mindre viktigt | Ganska viktigt | Viktigt  | Mycket viktigt | Ingen åsikt |
|-------------------|----------------|----------------|----------|----------------|-------------|
| $\Box_1$          | $\square_2$    | $\square_3$    | $\Box_4$ | $\square_5$    | $\square_6$ |

## h. <u>Kontroll</u>

• Att du är bekväm med att använda Internet och tekniken – känna kontroll.

| Inte alls viktigt $\Box_1$        | Mindre viktigt $\Box_2$ | Ganska viktigt $\square_3$ | Viktigt $\Box_4$ | Mycket viktigt | Ingen åsikt<br>D <sub>6</sub> |
|-----------------------------------|-------------------------|----------------------------|------------------|----------------|-------------------------------|
| i. <u>Pris</u>                    |                         |                            |                  |                |                               |
| <ul> <li>Varans / Tjän</li> </ul> | stens pris.             |                            |                  |                |                               |
| Inte alls viktigt $\Box_1$        | Mindre viktigt $\Box_2$ | Ganska viktigt $\square_3$ | Viktigt $\Box_4$ | Mycket viktigt | Ingen åsikt<br>D <sub>6</sub> |

Tack för din medverkan!

#### Appendix 2. The Questionnaire in English

Kristianstad University - International Business Program

#### Survey about: TRUST FOR E-COMMERCE

Please check the alternative that applies for you

**1.** Are you... Male  $\Box_0$  Female  $\Box_1$ 

**2.** Age: 18-29 years  $\Box_1$  30-39 years  $\Box_2$  40-49 years  $\Box_3$  50-59 years  $\Box_4$  60 years -  $\Box_5$ 

**3.** Which attitude do you have towards using the Internet, to purchase products/services?

Positive  $\Box_1$  Negative  $\Box_2$  No opinion  $\Box_3$ 

**4.** How often do you shop on the Internet?

Never  $\Box_1$  1-2 times per year  $\Box_2$  More than 2 times per year  $\Box_3$ 

1-2 times per month  $\Box_4$  More than 2 times per month  $\Box_5$ 

**5.** If you have purchased / would purchase on the Internet, <u>how important</u> are the following factors for you to <u>feel trust</u> to purchase on the Internet?

#### a. <u>Security</u>

• Secure and reliable payment systems.

| Not important at all $\Box_1$          | Less important $\Box_2$ | Pretty important $\square_3$ | Important $\Box_4$ | Very important $\Box_5$ | No opinion $\square_6$ |
|--|-------------------------|------------------------------|--------------------|-------------------------|------------------------|
|  | -2                      | <b>—</b> 5                   | -4                 | -3                      | -0                     |
| <ul> <li>Information about</li> </ul>  | t how security so       | olutions work.               |                    |                         |                        |
| Not important at all                   | Less important          | Pretty important             | Important          | Very important          | No opinion             |
|  | $\square_2$             | <b>L</b> 3                   | $\square_4$        | <b>L</b> 5              | $\square_6$            |
| <ul> <li>Possibility to cho</li> </ul> | ose payment met         | thod (for example,           | invoice, cash      | on delivery, bank/      | credit card).          |
| Not important at all                   | Less important          | Pretty important             | Important          | Very important          | No opinion             |
| $\square_1$                            | $\square_2$             | $\square_3$                  | $\square_4$        | $\square_5$             | $\square_6$            |
| b. <u>Privacy</u>                      |                         |                              |                    |                         |                        |

#### • Knowledge about how the personal information that you fill in, when ordering, is handled.

| Not important at all | Less important | Pretty important | Important | Very important | No opinion  |
|----------------------|----------------|------------------|-----------|----------------|-------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\Box_4$  | $\square_5$    | $\square_6$ |

• Policy for the handling of personal information, on a visible place on the company's homepage.

| Not important at all | Less important | Pretty important | Important   | Very important | No opinion  |
|----------------------|----------------|------------------|-------------|----------------|-------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\square_4$ | $\square_5$    | $\square_6$ |

#### c. <u>Guarantees</u>

• Standard terms in connection to the order form (terms for returns, refunds etc.).

| Not important at all | Less important | Pretty important | Important | Very important | No opinion     |
|----------------------|----------------|------------------|-----------|----------------|----------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\Box_4$  | $\Box_5$       | $\bar{\Box}_6$ |

• Confirmation on the order and purchase.

| Not important at all | Less important | Pretty important | Important | Very important | No opinion  |
|----------------------|----------------|------------------|-----------|----------------|-------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\Box_4$  | $\square_5$    | $\square_6$ |

#### d. Customer Service

• Possibility to ask questions and get help directly, online or by telephone.

| Not important at all | Less important | Pretty important | Important | Very important | No opinion  |
|----------------------|----------------|------------------|-----------|----------------|-------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\Box_4$  | $\square_5$    | $\square_6$ |

#### e. <u>Familiarity</u>

• The Brand.

No opinion Not important at all Less important Pretty important Important Very important  $\Box_1$  $\square_2$  $\square_3$  $\Box_4$  $\Box_5$  $\Box_6$ • Reputation / Recommendations, for example, in media, from family and friends. Not important at all Less important Pretty important Important Very important No opinion  $\Box_1$  $\square_2$  $\square_3$  $\Box_4$  $\Box_5$  $\Box_6$ f. The Website Design – how the website looks. Pretty important Not important at all Less important Important Very important No opinion  $\Box_1$  $\square_2$  $\square_3$  $\Box_4$  $\square_5$  $\Box_6$ • Functionality – user friendly, easy to navigate in the menus etc. Very important No opinion Not important at all Less important Pretty important Important  $\Box_1$  $\square_2$  $\square_3$  $\Box_4$  $\Box_5$  $\Box_6$ 

#### g. Information

• Information about the company on the website (for example, who owns the company, number of years in business etc.).

| Not important at all | Less important | Pretty important | Important | Very important | No opinion  |
|----------------------|----------------|------------------|-----------|----------------|-------------|
| $\Box_1$             | $\square_2$    | $\square_3$      | $\Box_4$  | $\square_5$    | $\square_6$ |

# h. <u>Control</u>

• That you are convenient with using the Internet and the technology – feel control.

| Not important at all $\Box_1$ | Less important $\square_2$ | Pretty important $\Box_3$ | Important $\Box_4$ | Very important $\square_5$ | No opinion $\Box_6$ |
|-------------------------------|----------------------------|---------------------------|--------------------|----------------------------|---------------------|
| i. <u>Price</u>               |                            |                           |                    |                            |                     |
| • The price of the p          | roduct / service.          |                           |                    |                            |                     |
| Not important at all $\Box_1$ | Less important $\square_2$ | Pretty important $\Box_3$ | Important $\Box_4$ | Very important $\Box_5$    | No opinion $\Box_6$ |

Thank you for your participation!

# Appendix 3. Calculated mean values of the answers on each subfactor, according to gender

| Question 1. Gender  | Male | Female |
|---|------|--------|
| Secure and reliable payment systems.  | 4,89 | 4,94   |
| Information about how security solutions work.  | 4,73 | 4,76   |
| Possibility to choose payment method (for example, invoice, cash on delivery, bank/credit card).                    | 4,61 | 4,66   |
| Knowledge about how the personal information that you fill in, when ordering, are handled.                          | 4,54 | 4,76   |
| Policy for the handling of personal information, on a visible place on the company's homepage.                      | 4,58 | 4,70   |
| Standard terms in connection to the order form (terms for returns, refunds etc.).                                   | 4,61 | 4,68   |
| Confirmation on the order and purchase.   | 4,53 | 4,63   |
| Possibility to be able to ask questions and get help directly, online or by telephone.                              | 4,45 | 4,50   |
| The brand.  | 4,10 | 4,09   |
| Reputation / Recommendations, for example, in media, from family and friends.                                       | 4,10 | 4,05   |
| Design - how the website looks.   | 3,56 | 3,68   |
| Functionality - userfriendly, easy to navigate in the menues etc.   | 4,43 | 4,37   |
| Information about the company on the website (for example, who owns the company, number of years in business etc.). | 3,74 | 3,62   |
| That you are convenient with using the Internet and the technology - feel control.                                  | 4,35 | 4,30   |
| The price of the product / service.   | 4,52 | 4,49   |
| Valid N (listwise)  | 118  | 82     |

| Question 2. Age   | 18-29 | 30-39 | 40-49 | 50-59 | 60 - |
|---|-------|-------|-------|-------|------|
| Secure and reliable payment systems.  | 4,92  | 4,82  | 4,94  | 4,97  | 5,00 |
| Information about how security solutions work.  | 4,63  | 4,62  | 4,83  | 4,91  | 5,09 |
| Possibility to choose payment method (for example, invoice, cash on delivery, bank/credit card).                    | 4,67  | 4,42  | 4,86  | 4,57  | 4,91 |
| Knowledge about how the personal information that you fill in, when ordering, are handled.                          | 4,57  | 4,58  | 4,75  | 4,60  | 4,91 |
| Policy for the handling of personal information, on a visible place on the company's homepage.                      | 4,49  | 4,53  | 4,72  | 4,91  | 4,73 |
| Standard terms in connection to the order form (terms for returns, refunds etc.).                                   | 4,52  | 4,58  | 4,75  | 4,77  | 4,82 |
| Confirmation on the order and purchase.   | 4,65  | 4,40  | 4,64  | 4,60  | 4,73 |
| Possibility to be able to ask questions and get help directly, online or by telephone.                              | 4,40  | 4,42  | 4,47  | 4,63  | 4,64 |
| The brand.  | 3,90  | 4,00  | 4,03  | 4,54  | 4,45 |
| Reputation / Recommendations, for example, in media, from family and friends.                                       | 4,08  | 3,93  | 4,14  | 4,14  | 4,45 |
| Design - how the website looks.   | 3,44  | 3,36  | 3,89  | 3,74  | 4,45 |
| Functionality - userfriendly, easy to navigate in the menues etc.   | 4,33  | 4,36  | 4,39  | 4,51  | 4,73 |
| Information about the company on the website (for example, who owns the company, number of years in business etc.). | 3,49  | 3,60  | 3,47  | 4,06  | 4,82 |
| That you are convenient with using the Internet and the technology - feel control.                                  | 4,32  | 4,16  | 4,36  | 4,49  | 4,64 |
| The price of the product / service.   | 4,44  | 4,44  | 4,53  | 4,63  | 4,73 |
| Valid N (listwise)  | 63    | 55    | 36    | 35    | 11   |

# Appendix 4. Calculated mean values of the answers on each subfactor, according to age

# Appendix 5. Calculated mean values of the answers on each subfactor, according to the respondents' purchase behaviour

| Question 4. How often do you shop on the Internet?  | Never | 1-2 times<br>per year | More than<br>2 times<br>per year | 1-2 times per month | More than<br>2 times<br>per month |
|---|-------|-----------------------|----------------------------------|---------------------|-----------------------------------|
| Secure and reliable payment systems.  | 4,97  | 4,84                  | 4,93                             | 4,82                | 5,00                              |
| Information about how security solutions work.  | 4,92  | 4,69                  | 4,68                             | 4,36                | 4,71                              |
| Possibility to choose payment method (for example, invoice, cash on delivery, bank/credit card).                    | 4,72  | 4,61                  | 4,59                             | 4,45                | 4,57                              |
| Knowledge about how the personal information that you fill in, when ordering, are handled.                          | 4,74  | 4,44                  | 4,68                             | 4,73                | 4,86                              |
| Policy for the handling of personal information, on a visible place on the company's homepage.                      | 4,80  | 4,45                  | 4,64                             | 4,64                | 4,57                              |
| Standard terms in connection to the order form (terms for returns, refunds etc.).                                   | 4,67  | 4,69                  | 4,58                             | 4,45                | 4,71                              |
| Confirmation on the order and purchase.   | 4,66  | 4,44                  | 4,58                             | 4,82                | 4,71                              |
| Possibility to be able to ask questions and get help directly, online or by telephone.                              | 4,66  | 4,39                  | 4,39                             | 4,27                | 4,57                              |
| The brand.  | 4,21  | 4,02                  | 4,07                             | 4,09                | 4,00                              |
| Reputation / Recommendations, for example, in media, from family and friends.                                       | 4,28  | 4,03                  | 3,95                             | 4,27                | 3,57                              |
| Design - how the website looks.   | 3,77  | 3,45                  | 3,58                             | 3,73                | 3,71                              |
| Functionality - userfriendly, easy to navigate in the menues etc.   | 4,56  | 4,42                  | 4,25                             | 4,18                | 4,57                              |
| Information about the company on the website (for example, who owns the company, number of years in business etc.). | 4,23  | 3,35                  | 3,44                             | 3,91                | 3,71                              |
| That you are convenient with using the Internet and the technology - feel control.                                  | 4,46  | 4,21                  | 4,29                             | 4,36                | 4,57                              |
| The price of the product / service.   | 4,57  | 4,37                  | 4,53                             | 4,73                | 4,57                              |
| Valid N (listwise)  | 61    | 62                    | 59                               | 11                  | 7                                 |