The Purchase Decision Process Revisited:

The Role of the Internet on Swedish Consumer Behaviour

Authors

Henrik Hallgren
Wilhelm Reuterswärd

Tutor

Magnus Lagnevik

Abstract

Title: The Purchase Decision Process Revisited: The Role of the Internet on Swedish Consumer Behaviour

Date of the seminar: June 3, 2008

Course: BUSM08, Master thesis in international marketing

Authors: Henrik Hallgren
Wilhelm Reuterswärd

Advisor: Magnus Lagnevik

Keywords: Information search, Internet, consumer behaviour, gender differences

Thesis purpose: To provide further understanding on how Swedish consumers use the Internet as an information source in their purchase decision process. The subject is investigated from different perspectives: gender, product type and information type.

Methodology: The authors used a quantitative approach. A survey (n=120) was conducted, using a self completion questionnaire, at a large shopping mall outside Lund. The sample was analysed for differences using independent samples t-test in SPSS.

Theoretical perspective: The generic model of the purchase decision process together with theory on gender differences, word-of-mouth, information value as well as other studies relating Internet to consumer behaviour were used to guide the research.

Empirical data: A self-completion questionnaire provided the empirical data for the study.

Conclusion: Men and women are equally influenced by traditional word-of-mouth, but more men than women search for product information online and they are more likely to let their purchase decision to be influenced by it. Women tend more to trust commercial sources. The respondents displayed a distinct preference for information of objective nature, such as price and functional information, and a scepticism towards subjective information, as the credibility of such is difficult to determine. Despite a significant difference in average price, an equal number of camera buyers and computer buyers searched for information online. Computer buyers showed a tendency towards trusting word-of-mouth sources, whereas camera buyers tended to rely more on consumer information sources.

Preface

This thesis could not have been written without the kind participation of one hundred and twenty shoppers who spent their valuable time filling out our questionnaire, and Nova Lund, for allowing us to conduct our survey on their premises. We also would like to give special thanks to our peer group: Carl-Johan Ingvarsson, Christopher Johansson and Alexander Klaus for providing us with valuable comments on early drafts. Finally, we are grateful to our supervisor, Magnus Lagnevik, for his support and encouragement during the process.

Lund, 27th of May, 2008

Henrik Hallgren and Wilhelm Reuterswärd

Table of contents

1 Introduction

1.1 Consumer life meets the online revolution

In our daily lives as consumers, some purchases require more attention than others. Some purchase decisions are made without any prior consideration; they are simply the result of one's own spontaneousness. You might make an unplanned stop when you are out driving, just because you have seen a sign that advertises that strawberries are sold at a road side stand. Or you may decide to go into a clothing store and buy a shirt you saw while walking by the display window; not because you had felt a particular need to buy an additional shirt lately; but simply because you liked the one in the window and you felt an urge to buy it. And with grocery shopping, most people don't use a shopping list, particularly not men (Underhill, 2006). On the other side of the spectrum are those purchases that you perhaps only make once in a lifetime. Deciding on what house to buy for example, or choosing what university to go to. Buying a car is also seen as a major decision by most people as it generally involves spending a significant amount of money.

The question of how much effort that goes into a purchase decision and what factors that influences it has been a subject of interest among researchers for many decades, and the general research area of which it is part of is called *consumer behaviour*. Within the area of consumer behaviour, a major topic is *consumer search*, which involves the study of how consumers go about when they feel the need of gathering additional information before a purchase. Such a purchase that takes some effort and information search is referred to as a *high-involvement* purchase, as opposed to the *low-involvement* purchase, where we feel little need for additional information in order to make the purchase decision. However, much of the theory that surrounds the area of consumer information search is currently being reviewed and updated as a result of the introduction and wide-spread penetration of a most formidable information tool: the Internet.

Ever since the Internet received wide-spread adaptation in the late nineties and in the early twenty-first century, it has become a natural part of the daily lives of many people, not just the ones with a particular interest in computers or technology. This is particularly true for Sweden, which forms the context in which this study is written. Seven out of ten have a broadband connection; half of the population in their early retirement uses the Internet on a daily basis and among the Swedish youth and young adults, 97 % uses the Internet (WII, 2008). Both of the authors of this study are born in the first half of the eighties, and thus belong to one of the first generations that have not experienced adulthood without the presence of the Internet. This study can be seen as a consequence of this fact; Internet is a natural part of our lives, and this includes our role as consumers. Hence, this thesis is the outcome of a shared interest in the topic of consumer behaviour, and how the Internet phenomenon changes the way people act as consumers.

1.2 The stepping stone: different perspectives on consumer decision making

In the purchasing process of a high-involvement product, customers need to search for information in order to make a decision on what to buy. Before the introduction of the Internet, consumers searched for information on traditional channels of communication such as television, radio, printed media and billboards. With these types of information sources companies were able to force their brand message on the consumers as a consequence of companies having better access to information than customers. Access to information is the key determinant of bargaining power and companies were therefore able to extract more value from transactions than customers with access to less information (Armstrong and Hagel, 1997). But since the introduction of the Internet in the mid nineties, the consumers are provided with a far more extensive information source. For instance, members of virtual communities can easier find offerings with the best combination of quality and price tailored to his or her individual needs (Armstrong and Hagel, 1997).

The traditional view of consumer search behaviour focuses on three different kinds of information sources: personal (friends, family, and other acquaintances), commercial (advertising, salespeople, dealers) and public (mass media, consumer-rating organizations) (Armstrong and Kotler, 2002). All these three have an online variant, which means that Internet can be said to influence all of the traditional sources of information. Therefore, further understanding on *how* the Internet influences these information sources is needed. As the extent of the search undertaken is determined by the complexity of the product, the natural focus of this thesis is on these complex products, or high-involvement goods. With high-involvement goods, personal sources, more commonly referred to as word-of-mouth, are a particularly important source of information (Solomon et al., 1999).

Since the introduction of the Internet with more accessible information, customers have been changing their pre-purchase consumer behaviour, and word-of-mouth has received considerable attention from researchers in recent years. Hennig-Thurau et al. (2004) consider WOM to play a major role for consumers in their buying decisions. Furthermore, the Internet has extended consumers options for gathering unbiased information by engaging in electronic word-of-mouth (eWOM) (Hennig-Thurau et al., 2004). With the Internet as an information source, communication between consumers is open for everyone to participate; anyone can listen to Internet discussions taking place on forums or weblogs. However, there is only limited research on consumers' eWOM communication, particularly its impact on the general population. The authors of this paper will therefore investigate further the role of the eWOM in the consumer search behaviour. A study by Keller and Berry (2006) showed that 90 % of all WOM conversations take place offline. However, another study showed that those who act as opinion leaders rely heavily on the Internet as a source of Information (Keller Fay, 2006).

With the Internet as a new type of information source there has not only been differences within WOM, but also between genders. Gender is the most common form of segmentation used by marketers (Kim et al., 2006). Men and women differ in information processing and decision making. With the growing use of the Internet in this day, there is a need for further understanding on the online user's attitudes and behaviours from a gender perspective. What are the main reasons behind differences in the Internet usage between men and women? Another interesting question to answer is the reason why men and women not always rely on

the information on the Internet. What are the main factors that decide why consumers not always, in every pre-purchase situation use the Internet.

The consumer search behaviour has since the introduction of the Internet been influenced by factors such as the information source utility, personal factors and product factors. Grant, Clarke and Kyriazis (2007) argue that the consumer information process for these three factors are not well understood when it comes to the Internet. Some consumers identify the information presented on the Internet as inaccurate and insufficient (Grant et al., 2007). Other consumers prefer other sources than Internet due to the higher perceptions of risk attached to online sources. These facts are of importance for the understanding of the information needs for consumers searching on the Internet. For instance, how will different types of products influence the consumers' search behaviour? When is the Internet more appropriate to use than traditional marketing tools? These are some of the questions that the authors identified.

Since the introduction of the Internet, the consumer search behaviour is changing. Some consumers have been totally influenced by this new information source while others are using other offline sources. The facts and arguments mentioned above are reasons to why some people prefer Internet and some prefer offline sources. From this background, the authors formulated four research questions:

- Is there a difference between men and women with regards to Internet search behaviour?
- Is there a difference in Internet search behaviour, depending on what kind of product that is being considered?
- What type of information do consumers search for when they go online?
- What are the general attitudes and opinions of consumers towards Internet as a pre-purchase information tool?

1.3 Purpose

Based on the discussion and research questions above, the purpose of this thesis is to provide further understanding on how consumers use the Internet as an information source in their purchase decision process. The authors take a general stand, with the intention to describe the role of the Internet from several different perspectives: gender differences, product differences, information types as well as general attitudes towards Internet. These will be analysed both by using established frameworks, as well as making comparisons to newer studies on consumer search behaviour on the Internet.

1.4 Delimitations

This study focuses on pre-purchase information search when buying high-involvement products and two different kinds of high-involvement products was chosen: cameras and computers. The main reason for this was simply that having only one product type in the investigation would decrease the study's generalisability. For example, if only computers were investigated, these results would be more vulnerable to the objection that having data on only one type of product would say little on consumer Internet search in general. By including

two different products in the study, the authors were able to make comparisons between them and detect relevant differences, if any.

The reason why home electronics products were chosen was the relatively high amount of information that exists online for this category. The products can be evaluated on several objective attributes. Computers represent a more expensive, more complex product, whereas cameras in general are cheaper and less complex. What is important to note here also is that whether or not the product was bought online were of minor interest to the authors, as we were mainly concerned with Internet as an information tool, not as a place to shop.

2 Literature review

In this section, the theory which formed the basis for the research design will be presented. Before a more complex discussion concerning online consumer search behaviour, the authors begin by describing the general model of the purchase decision process. This model is a cornerstone in consumer behaviour theory and it forms the foundation for our investigation. The purchase decision process as a theoretical model has constantly evolved during many decades, and in order to understand where online consumer behaviour fits into existing knowledge, the general model has to be described.

2.1 The Purchase decision process

When looking at Internet and its role in the consumer behaviour context, it is important to recognize that Internet probably plays a role not only in the information search phase, but also in the early stages of the decision process, before the consumer has decided that a product is needed, as well as the post-purchase issues, when the consumer experiences the product. The purchase decision process has been conceptualized in a variety of forms, and the dominant model is the five-step structure, as described by for example Solomon, Bamossy and Askegaard (1999), and Armstrong and Kotler (2002). The purchase decision is divided into five steps: *need recognition, information search, evaluation of alternatives, purchase decision* and *post-purchase behaviour*. Some suggest a four-step structure instead, such as Dubois (2000), where the *evaluation of alternatives* and *purchase decision* are grouped together in the same step. Since the main focus of our study is consumer search behaviour, we will only discuss the two first steps of the purchase decision process. The logic behind this is that in the third step, the evaluation of alternatives, the consumer has left the search phase and has arrived at a few different alternatives to chose from. That is, they now *have* the information, and at this point the question is *how* they will choose among the alternatives. That is not to say that Internet does not play a role here too, which it may very well do. For example, the consumer's brand perception and preference might have changed as a result of visiting a website. However, this thesis focuses on the search behaviour as such and the discussion on the Internet's role in shaping brand perceptions with the consumer lies outside the delimitations of the thesis.

2.1.1 Need recognition

The purchase decision process begins with the consumer recognizing a need or a problem. This may be caused be *internal stimuli*, which is when a person's internal needs such as thirst, become so great that they trigger a drive to satisfy them. It may also be the result of *external stimuli*, such as the desire to have a television set in order to watch football at home. For marketers, it is important to analyse consumer behaviour already in this early stage, to be able to understand how a need arises and what the driving forces behind need recognition are (Armstrong and Kotler, 2002). Obviously, the need recognition phase varies significantly between different types of products. For the products investigated in this thesis, there usually are several different kinds of forces that lie behind the recognition of a need. To begin with, products like computers and cameras are characterized by *planned obsolescence* – constantly renewed in order to trigger to consumer's desire for replacing what's old – even if it still is in

perfectly working order. TVs get bigger and bigger, computers get bigger monitors and faster processors, and digital cameras get higher and higher resolution, or "mega pixels". Here, the need is triggered as a result of altered *standard of comparison* that has in turn altered the *ideal state* (Dubois, 2000; Solomon et al., 1999).

2.1.2 Information search

When the consumer has decided that a need has arisen, that needs to be fulfilled, the information search begins. Most often this search is passive, for example when you are exposed to commercials when you watch television. Thus, even though you don't have a need for a particular product when you see for example an advertisement, repeated exposure establishes product associations. Then, when the need arises, you immediately come to think of the company whose advertisement you have seen, and perhaps you do not engage in further information search.

In the other case, the consumer actively engages in a search for information when a need is recognized. This type of search is called *pre-purchase search*, and is characterized by the fact that the consumer may not be particularly interested in the product for which a need has come about, but still is determined to make a well-informed choice (Bloch, Sherell and Ridgway, 1986). Here, the determinant is the involvement in the *purchase*. In contrast to pre-purchase search, the *ongoing search* refers to consumers who enjoy browsing around products with no specific intention to buy for the moment. These shoppers search for information not because of an imminent need that has to be satisfied, but instead they simply want to stay up to date. If the determinant for the pre-purchase search was the involvement in the purchase, the determinant in the ongoing search is instead the *product*.

Pre-purchase search	*Ongoing search*
Determinants	
Involvement in the purchase	Involvement with the product
Market environment	Market environment
Situational factors	Situational factors
Motives	
Making of better purchase decisions	Building of a bank of information for future use
	Experiencing of fun and pleasure
Outcomes	
Increased product and market knowledge	Increased product and market knowledge leading to - Future buying efficiencies - Personal influence
Better purchase decisions	Increased impulse buying
Increased satisfaction with the purchase outcome	Increased satisfaction from search and other outcomes

Table 1. A framework for consumer information search. Source: Solomon et al. (1999).

Information sources

The types of information sources used can be divided into three different kinds (Solomon et al., 1999). There are impersonal and marketer-dominated sources, such as retailers, company websites, and catalogues. Secondly, there are personal sources such as friends, family and

neighbours. These sources of information are more commonly referred to as *word-of-mouth*. Lastly there are third-party sources with independent information, such as the consumer magazine "Råd & Rön" and the consumer television program "Plus", and regular newspapers generally have a section with consumer advice that often feature comparative tests and other kinds of consumer advice. There are also numerous websites with independent consumer advice, for example Cnet.com. These three kinds of information sources were used as a basis for developing the major quantitative question in the questionnaire. In this question, we added to all three kinds of sources with online kinds, for example *manufacturer's website* as a marketer-dominated source, or *advice from other persons online* as a personal source.

Determinants of the extent of the information search

There are a number of determinants that influence how much search the consumer is willing to undertake. All things being equal, younger, better educated who enjoys shopping do more information search and women tend to do more information search than men (Solomon et al., 1999).

Expertise

Studies have shown that the extent of the information search undertaken by the consumer is U-shaped; depending on the prior *expertise* the consumer has in the product type (Alba and Hutchinson, 1987). Consumers with very high knowledge of the product may rely completely on their existing knowledge, and therefore do not engage in further information search. In the middle are those with average knowledge. They are the type of consumer most likely to engage in further information search; since they already have some knowledge of the product and feel a need to gather more information before they can reach to a decision. In the other end of the U are the consumers with very little knowledge of the product needed. With little knowledge, they feel overwhelmed by the perceived complexity and therefore don't know where to start the information search, and may not initiate an information search at all. These consumers are more likely to base the decision on a familiar brand or the price (Solomon et al., 1999).

Risk

A major factor influencing the extent of the information search effort is the level of *perceived risk*. When the consumer is faced with a high involvement purchase decision, the information search becomes a means of avoiding potentially negative consequences from the purchase (Dubois, 2000). Consumer behaviour literature (Solomon et al., 1999; Dubois, 2000) lists five types of perceived risk:

- Monetary/financial risk – the risk of loosing money.
- Functional risk – the risk that the product bought fails to live up to the expectations when the alternatives might. This risk is especially high when buying products with high switching cost.
- Physical risk – the risk of getting physically hurt from the product, from for example mechanical items or from food.
- Social Risk – the risk of social embarrassment as a result of products bought, for example clothing, cars, homes etc.
- Psychological risk – the risk of feeling guilty or loosing self-esteem from making a bad decision.

The general model of the purchase decision process is comprehensive and well-established. However, since the introduction of the Internet in the mid nineties, the consumers are now provided with a far more extensive information source, and since then researchers have given this much attention. In the following sections, the authors will present this research, and discuss the different ways of studying contemporary consumer behaviour and its link to established theory. Here, the authors pay specific attention to word-of-mouth and its online counterpart, gender differences in online search behaviour, as well as more general studies on consumer Internet search.

2.2 Word-of-mouth – offline and online

2.2.1 Introduction

Word-of-mouth communication (WOM) has been a topic of considerable attention to marketing researchers and practitioners for a lot of reasons (Gruen et al., 2005). WOM has a significant impact on consumer choice and is also an essential tool for post-purchase perceptions (Bone, 1995). Furthermore, Richins (1983), consider WOM to be more effective than traditional marketing tools of personal selling and advertising. In today's market WOM has increased in importance through its role in virtual communities (Hagel and Armstrong, 1997). The Internet is the source for electronic word-of-mouth (eWOM) and research has shown that eWOM may have higher credibility and relevance to customers than marketer-created sources of information on the web (Bickart and Schindler, 2001). People participating in eWOM have both a social and economic intention behind the interaction, and therefore may have different motivations in using or generating eWOM (Hennig-Thurau et al., 2004). Hennig-Thurau et al. (2004) found also that people participating in eWOM have similar motivations as people interacting in traditional WOM. These findings suggest that eWOM effects on consumers may be very similar to WOM effects. Armstrong and Hagel (1997) have focused on three basic needs (interest, relationship and transaction) and customer's willingness to emphasize one need more than the others.

Internet has also given customers the opportunity to find their own consumption-related advice by engaging in electronic word-of-mouth (eWOM). eWOM communication can also take place in many ways, not just in virtual communities, and the definition of eWOM is drawn as: "any positive or negative statement made by potential, actual or former customers about a product or a company, which is made available to a multitude of people and institutions via Internet" (Hennig-Thurau et al., 2004, p. 39).

Motives for engaging in eWOM Communication
Only a few studies have analyzed the motives underlying eWOM, but the study of Balasubramanian and Mahajan (2001) provided a framework for considering the integration of economic and social activity within virtual communities. This study has resulted in the distinction of three types of social interaction utility: focus related utility, consumption utility and approval utility.

Focus-related utility is the utility the consumer receives when adding value by providing reviews and comments on products and services on the community (Hennig-Thurau et al., 2004). This focus-related utility is concentrated on four motives that explain the desire to help other people with their buying decisions. For instance, consumers online may help each other with their buying decisions to save each other from negative experiences. Another motive is consumer's consciousness to help companies on these communities. Satisfied consumers will engage in eWOM communication to give the company something in return for a good experience. But dissatisfied consumers are also aware of that negative consumer comments can influence the way a company is perceived. Therefore, the focus-related utility can be used as a power mechanism to shift power from companies to consumers (Hennig-Thurau et al., 2004).

Consumption utility is about interaction on the virtual communities by obtaining value through direct consumption. Hennig-Tharau et al. (2004) define consumption in this context when consumers read the product reviews and comments written by others. Sometimes is this comment about describing experiences of a product or about discussing problem-solving information. Consumers can also with this type of utility gain useful feedback for post-purchase advice-seeking (Hennig-Thurau et al., 2004).

The last utility, approval utility, is about grading the individuals regarding the usefulness of the information provided. From the approval utility Hennig-Tharau et al. (2004), have identified two motives: self enhancement and economic rewards. Self enhancement motivation is about the consumer's desire for positive recognition from others. Consumers within this motivation want to be perceived as the consumption experts or intelligent shoppers by other consumers. Hennig-Tharau et al. (2004) argue that electronic communication allows consumers to feel a kind of connoisseurship or a level of social status. The second motivation within approval utility is economic rewards and distinguishes eWOM from traditional WOM communication. The eWOM information provider will in some cases be rewarded by the community operator for his or her appreciation and behaviour online.

2.3   Internet for pre-purchase information search

As we discussed above Internet has opened new opportunities for customers to interact with each other. In addition, Jepsen (2007) argues that Internet has given customers the opportunity for conducting pre-purchase information search. The reason for the use of Internet in the pre-purchase information search is because of the perceived risk involved in making a high-involvement decision (Jepsen, 2007). The information available on the Internet is extensive and the cost by searching for information on the Internet is low. Still, there are factors that determine how the Internet is used and there are differences in the way consumers value the information found. Consequently, Jepsen (2007) outlines a number of different factors concerning the attitudes towards the Internet for pre-purchase information search.

Firstly, the low search costs can be expected to increase the use of Internet for information search. But most of the information available on the Internet is often not organized for consumer search. For that reason, there are some consumers that do not search the Internet for information due to the fact that the perceived availability of the information needed is low (Alba et al., 1997). Another factor that influence consumers in their information search is the higher level of subjective product knowledge on the Internet. Consumers must feel confident and feel that they are able to trust the information source. For example, many consumers feel

that the information on the commercial websites is too biased (Raman, 1997). Therefore, consumers with more knowledge about Internet and the product will feel better equipped to select among the quantities of information available on the Internet (Jepsen, 2007). A third factor that has influenced consumers in their information search is the lack of physical contact with sales staff while searching for information on the Internet. Some consumers see this lack of sales staff as a benefit, whereas other consumers enjoy the contact with sales personnel (Wolfinbarger and Gilly, 2001). Traditional shopping is more of a social event that gives consumers the opportunity to leave home and socialize with others. For instance, Van Slyke, Comunale and Belanger (2002) argue that women enjoy the shopping experience more compared to their male counterparts. A final note here to be made is the interest in the product itself and how this can provide benefit from information search. A higher level of interest in the product may result in an increased use of the Internet for information search (Jepsen, 2007).

From the factors mentioned above, Jepsen (2007) has suggested a model that explains the extent of consumer use of the Internet for information search. One distinction in this model is that consumers who are used to and like shopping from home are more consistent with the use of Internet for information search. Furthermore, Jepsen (2007) argue for two types of benefits involved in using Internet as the information search. The first benefit is about the importance of the Internet in a person's life. Consumers using Internet regularly have a more positive perception because they are more skilled in navigating the Internet. The second benefit is about consumer's opportunity to search for products whenever the consumer feels like it. This benefit is more significant for consumers who have a special interest in a product. However, Jepsen's model did not show that enjoyment in personal contact with sales staff affected the use of Internet negatively. Therefore, the lack of physical contact does not stop consumers from using the Internet (Jepsen, 2007).

2.4   Internet from an information value perspective

Since the introduction of the Internet in the mid nineties people expected traditional distribution channels to suffer as consumers used online purchasing due to the easier product information (Grant et al., 2007). Therefore, companies tried to use the Internet as a new way of doing business but surprisingly, sales did not meet the expectations. Grant et al., (2007) argue for the reason that past research is based on websites of standardized products and is therefore easily found by consumers; no purchase on the Internet is needed. The complexity associated with other types of products and services are not observed. Furthermore, Klein (1998) argues that websites with standardized products focus on basic consumer information rather than consumer utility. With this misunderstanding, researchers of today are more conscious about the consumer information search rather than online purchasing. The main focus for customers is to provide knowledge of products and reduce purchase choice anxiety. Further research regarding information search behaviour in the pre-purchase process is required. Grant et al. (2007) have therefore grouped the information search behaviour of consumers into three streams: (a) information source utility, which focuses on the online and offline issue, (b) personal factors that lead to different search behaviour for a common product and (c) product factors that will lead to different search behaviour by a consumer in the context of different products. In the following sections the authors will present the most important aspects of these three streams.

2.4.1 Information source utility

The first topic, information source utility, is divided into two areas: information content utility and information format utility. Information content utility considers with the content and information characteristics in depth. Information format utility is on the other hand dealing with communication effects (Grant et al., 2007).

Information content utility

A key characteristic of websites is the ability to show a lot of information that is not available in information offerings such as promotional material. Companies have with websites the flexibility to update their offerings in real time when price change and stock levels are exhausted (Grant et al., 2007). This theoretical utility has not been tested in practice but consumers are sometimes annoyed when they receive incorrect information.

Another important aspect of information utility is the comparison between "objective" and "subjective" information from online or offline information sources. Objective information is more as "searched" type information and about prices, product specifications of specific products while the subjective information tends to focus on a more personal and "experienced" level. Klein and Ford (2003), Yoon and Kim (2001) have shown that consumers have distinct preferences for online sources for "objective" information and distinct preferences for offline information sources when dealing with "subjective" information types. The reason why some consumers prefer offline "subjective" information instead of online information may be possibly due to the risk of using unidentified sources. Klein (1998) is looking for ways to communicate "subjective" information in a more "objective" search manner. The standardization of product attribute descriptions is thought to reduce the associated consumer risk in using these information sources.

Information format utility

In addition to the research gap of information content utility, there is also a gap in the information format utility. The difference in communication effects showed that consumer recall ability was better achieved in the off-line settings by print sources and that consumer recognition was superior in online information exchanges (Grant et al., 2007). This means that companies have to serve information sources that are best suited for the desired effect. Therefore, companies have to understand how customers react to different sources and how they skip between online and offline sources to find the most appropriate way for their utility.

2.4.2 Personal factors that lead to different search behaviour

In traditional consumer search behaviour offline, the personal factors have attracted much attention by researchers. Some of these facts were mentioned in the above sections about the purchase decision process during the discussion of expertise and risk. These parts are also investigated in the consumer search behaviour online, although there is limited research in the online area about other personal factors. Therefore, the authors will investigate these factors further in the next part.

Personal skills affecting consumer search behaviour has Grant et al. (2007) divided into three areas: technology skills, search skills and information processing skills. Technology skills and

search skills have been explored by Jepsen (2007) in an earlier chapter but the last factor, information processing skills is of importance and has to be considered to understand online consumer search behaviour. Information processing skills are about the consumer's ability to extract and process information that will satisfy their information needs (Grant et al., 2007). Consumers often find their favourite websites and return regularly to these with less processing costs. On the other hand, consumers searching for offline sources are often using different types of information source over time, with much higher processing costs.

The main reason behind information search online is the risk aversion for high involvement products. Risk avoidance includes losses such as financial, performance or social through purchase activity (Grant et al., 2007). The different types of risk will decide the level of personal involvement with the purchase and also the different consumer information preferences which may differ between individual consumers. Chauduri (2000) has separated the different types of perceived risk into two components, functional risk and emotional risk. Furthermore, Grant et al. (2007) exemplify these components and information search preferences with a motor sport enthusiast. The motor sport enthusiast purchases a sports car for its performance and therefore seeks information dealing with specifications. Another person may search for subjective or opinionated information because he/she perceives a different type of risk. For companies are these different motivations of interest when providing appropriate information to each of these potential customers (Grant et al., 2007). Companies have to be aware of the primary motivation that decides the outcome of the purchase.

2.4.3 Product factors that lead to different search behaviour

The review so far has presented the information source utility and the personal factors affecting consumer search behaviour. But Grant et al. (2007) believe that consumers also have different preferences for the information type when considering the type of good or service being sought. To understand these preferences the authors will have to recognize the potential and relationship between different information formats, both online and offline. Together with the relationship between online and offline information formats, the authors will in the next part describe the consumer search behaviour of two different types of products, *search-type* and *experience-type* products.

The majority of online information search studies have been conducted on search-type products which tend to be standardized. Klein (1998) has defined search-type products as those with product attributes for which full information can be obtained prior to purchase, such as cars and shoes. Given that most of the information tends to be standardized, consumers who search for these kinds of products can rely on "hard data" provided by retailers and manufacturers. But if we instead look upon experience-type products with greater complexity, the consumer search behaviour is different. These products has Klein (1998) defined as product attributes that cannot be known until product purchase and use of the product, such as travels packages. The information search is generally much more costly and difficult for experience products than search products. Before this kind of purchase consumers tend to rely on comments from friends and families, so called "soft data". Collecting information from human contacts can be costly and Internet has been of importance for virtual human contact within online consumer networks. Consumers searching for experience products are more willing to rank the information from other consumers to be more important whereas for search products, consumers rank information from retailers to be

more important. Rha (2002) adds that neutral evaluation information is more important for experience products than for search product because consumers can easily make a quality comparison based on "hard data". The cost of searching for neutral information through the Internet is less costly in comparison with offline sources. Therefore, Rha (2002) argues that online sources including neutral evaluation, such as web articles, may be more important for consumers searching for experience products.

With the introduction of the Internet there are now new possibilities to search for a substitute for product experience. Consumers can now easily get information of other product experiences from the products they are searching for. Klein (1998) assumes that Internet is able to transform traditional experience products into search products because the information of "experiencing" is available online. The best way to find these experiences is from discussion forums or blogs where consumers are able to exchange experiences.

2.5   Internet-forum versus marketer-generated online information

During the pre-purchase information search there are different sources that consumers can use in the attempt to capture as much product data as possible. The information sources on the Internet are divided into two groups, Internet-forum information and marketer-generated online information. Bickart and Schindler (2001) argue that several characteristics of Internet-forum information have a greater influence on consumer behaviour than marketer-generated Internet information. First of all, information presented on Internet forums has greater credibility than marketer-generated information. Consumers consider this information source to be more trustworthy because the opinions are judged from fellow consumers and therefore no intentions to manipulate the reader (Bickart and Schindler 2001). Secondly, the Internet-forum information may also be more relevant to consumers because the source is similar to the receiver. The fellow consumers discussing products on these forums will reflect upon typical product performance that perhaps increases the relevance to the customers. This is an important distinction in comparison to the information on marketer-generated online information, where a marketer communicates product data and most likely never used the product in a real-world setting. Finally, Internet forums are able to generate greater empathy among readers. There are fellow consumers writing about personal stories and these stories are able to entertain and educate other participants. Bickart and Schindler (2001) believe that the enthusiasm of a forum where authors describing the joys of a particular product could generate similar feelings in the mind of the reader.

2.6   Gender differences in the Internet search behaviour

Within the subject of consumer behaviour, relatively little research has been done on gender differences. An important question to answer is how men and women are likely to differ in the information process and if these gender differences can be separated into differential blueprints (Kim et al., 2006). Kim et al. (2006) argue that gender-related behaviour has been and continues to be an important factor for companies when dealing with marketing communications. To understand how men and women react differently in the information process we also have to explain the distinction between gender and sex. Gender is about how males and females are socially constructed and they act as masculine and feminine. However,

sex is the biological classification and explains if an individual is biologically male or female. Further on the authors will describe some specific personality traits for men and women.

Most often the social roles of men and women decide how they guide their judgments (Kim et al., 2006). For instance, men are reported to be more independent, confident, competitive, willing to take risks and less afraid to perceive product risk than females (Darley and Smith, 1995). Based on the information process and search behaviour males have a tendency to rely more on their own perceptions than women. As a result of this, men make decisions more quickly than women. In contrast, women relied on multiple sources of information before making a decision. The main focus for females is to gather information externally rather than relying on their own judgments. Therefore, Krugman (1966) argues that women are engaged in greater elaboration of advertisements than men. Kim et al. (2006) found greater stimulus elaboration among women than among men when subjects were given time to process information.

With the rapid growth of Internet, online information search behaviour has become a major research topic. Internet is gaining considerable attention because of the communicative and adaptive means of sharing information. Digital media of computer networks are different from the current mass media of television, radio, newspapers and magazines (Kim et al., 2006). The main reason behind this is the Internet's speed of access and flexibility in representing information. From a gender perspective, there is a difference in technology adaptation and men tend to be more interested in computers than women (Shashaani 1997). Already in the early high school girls are less interested in technology and are underrepresented in computer courses (Van Slyke et al., 2002). This tends also to continue during their working careers. Other researchers speculate that technology is a product of social relations itself and therefore favours men. It has also been stated that women are less likely to have a computer in the household and men dominate household decisions about computer purchases (Losh, 2003).

To understand the gender gap on the Internet, Wasserman and Richmond-Abbott (2005), define three aspects: (1) access to the Internet, (2) frequency of use of the Internet and (3) scope of use of the Internet. Access is defined as the opportunity for individuals to use the web with access to a computer in a private or public setting. The frequency is the amount of time the individual uses the Internet. Lastly, the scope of use refers to the variety of websites used by the individual.

Current studies investigating Internet access have found little significant variation in gender (Wasserman and Richmond-Abbott, 2005). As discussed above, the new technology made computers more popular for men in the home computer use. But women have more than ever before started to use computers in the home setting for consumer purchases and email messages with friends. For example, women are more likely than men to purchase products for home use, (kitchen products and decorative products), often on the web. Women are also more likely to use the web to maintain social contacts (Wasserman and Richmond-Abbott, 2005). These two examples indicate that gender variation in access to the web is relatively small.

The second aspect is about the amount of time an individual uses the web for social and professional activity. Internet is an important source for social entertainment but also for business and commercial activities (Wasserman and Richmond-Abbott, 2005). In the last aspect, the scope of use of the Internet, different websites are categorized into broad groupings. Some of these websites are referred to as male-oriented and some as female-

oriented. The variation in the scope and frequency of different websites by gender, are influenced by gender-specific differences related to the Internet. Wasserman and Richmond (2005) also mention the aspect of technology and argue that men are more familiar with technology and therefore they possess more information and skills about how to use this new technology.

3 Methodology

3.1 General approach

The subject of this thesis follows from one of the authors' own interest in conducting information search online. Internet price comparison sites, independent review sites as well as forums where consumers share their experiences with various products with each other, all relatively easily found by powerful search engines such as *Google*, constitutes a massive source of information that help the consumer to be better able to make a well informed decision. At least this was the basic assumption made by the authors in the beginning of the research process. In the early stages of our work, many different research strategies that could help us better understand the consumer online search behaviour was considered.

3.1.1 Netnography

Netnography is a term that has gained in importance over the last decade. First established by Kozinets (1998), the method is a way of applying ethnographic research into the Internet setting. Etnography is a kind of qualitative research, where the observer aims to take part and participate in what is being investigated. Thus, netnography means that the researcher observes virtual communities, sometimes as an active part in discussions and sometimes as a passive observer. The obvious advantage with this kind of research is that the researcher gets easy access to consumers' emotions, intentions, attitudes, feelings and so forth. However, this approach raises serious ethical questions, such as the appropriateness of anonymously listening in on online conversations. Kozinets (2002) therefore recommends that the researcher should always disclose his presence and intentions, and ensure confidentiality and anonymity of informants. Netnography was considered by the authors based on the described potential advantages. However, it was dismissed on the basis that this approach would not enable us to make generalizable conclusions on how the general public uses the Internet as an information search tool. Since it can be assumed that there is much more passive participants on online discussion forums than active, i.e. those who actually contribute to the discussion, drawing generalizable conclusions based on observed online conversations would be difficult.

3.1.2 Qualitative interviewing

The second alternative that was considered by the authors was to conduct an interview study, either on consumers or on managers. It was concluded that in-depth interviews with consumers would not allow for enough generalisability. Instead, this proposition would have an emphasis on how companies active on the consumer electronics market, both manufacturers and retailers, view the development of consumer online information search. Questions such as what they know about how their consumers' search for information, and how they are responding to the development of the Internet as an information source, was considered. The research would in that case be based on interviews with managers at different companies active on the consumer electronics market. However, this alternative was also deemed as unsuitable for our purpose. Firstly, it can be questioned whether managers would actually be willing to disclose the kind of information that we would be interested in, as this information would most probably be of sensitive and confidential nature. Secondly, it might

also be assumed that the knowledge of managers regarding the Internet issue may not be particularly extensive. Some companies might be relatively unaware of how the Internet affects their business.

3.1.3 The quantitative approach

Therefore, it was concluded that the type of empirical data best suited for our purpose was the quantitative type. Quantitative data collected from managers was ruled out for the same reason that was discussed in the previous section. Therefore, the research design discussion concluded that quantitative data collected from a sample of consumers was the best approach in order to fulfil the purpose. With this in mind, the authors proceeded in designing a research approach that would conform to our purpose and research questions. In this stage in the process, research questions and research design is constantly reviewed, revised and updated back and forth. Questions arise, such as:

- Is it possible to extract the kind of information we are looking for with the method selected?
- How can we adjust the method in order to give a better answer to the research question?
- Do we need to revise the research questions based on limitations in the method chosen?

This process is often called *operationalization* (Bryman and Bell, 2003), in which measures of the concepts the researcher is interested in is devised. The outcome of this process was in fact changes to both research questions and research design. For example, an early emphasis on online word-of-mouth was downplayed as it seemed difficult to investigate in a survey. On the other hand, nor would a completely quantitative survey, using only closed questions fulfil our purpose. Therefore, open questions were added to the questionnaire in order to get a better view of the respondents' opinions, feelings or attitudes.

According to Bryman and Bell (2003), the principal orientation to the role of theory in relation to research when it comes to quantitative research is the deductive approach. The advantage with this approach is that is enables conclusions to be made regarding the general population, based on a small sample (Trost, 2001). The deductive approach means that the researcher forms a hypothesis based on the theory on which the research is based. In this study, two hypotheses were formulated:

H1. There is a difference in whether or not Internet search is performed before a high-involvement purchase, depending on what kind of product is being considered.

H2. There is a gender difference in whether or not Internet search is performed before a high-involvement purchase.

3.2 Sampling

3.2.1 Research site

The first research site and potential respondents considered for the survey was the campus of Lund University School of Economics and Management. The sample would then obviously consist of mostly students. The logic behind this was the relatively easy access to a large number of cooperative respondents, achievable for example by handing out questionnaires during lectures. Another reason was the authors' emphasis on consumers that actually *had made* a purchase recently of a computer or other electronic product, as it could be assumed that most university students would have purchased a computer for their studies. The obvious disadvantage of this approach would of course be a sample bias, as the information search behaviour among university students might differ significantly from the rest of the population, which would decrease the generalisability of the study. Therefore, it was decided that in order to make the sample more representative of the general population, the survey would have to be conducted in a more public setting.

In order to achieve a more representative sample, the survey was conducted at a large shopping mall called *Nova Lund* in the outskirts of Lund, on the 5th and 6th of May, 2008. Consumers were approached at the entrances of the mall, where we introduced ourselves as students from Lund University. The respondents were asked if they were willing to participate in a survey in connection to a master's thesis. If the respondent accepted, it was then asked whether or not it had bought a new computer or a new camera over the last years. If the answer was yes, the respondent was given either of the two different questionnaires (one "computer" and one "camera"), based on whether a computer or a camera had been bought. If the answer was no, no purchase had been made for a long time, the respondent were thanked and then informed that it did not meet our sample requirements. If the respondent said something like "well, it has been quite a few years since I bought my camera/computer", it was asked "do you remember how you went about when making the purchase?" and if so, the respondent were given a questionnaire.

3.2.2 Sampling type

The sampling technique used in this study is a form of *non-probability sampling* that is called convenience sampling. This is a common form of sampling in the field of business and management (Bryman and Bell, 2003), and involves both advantages and disadvantages. It is less costly than probability sampling, and may still provide the researcher with a "springboard for further research" (Bryman and Bell, 2003, p. 105). On the other hand, the results are less generalizable compared to a probability sample. In our study, the total number of respondents was 120, divided into 60 male and 60 female respondents. In addition, of the 120 questionnaires handed out, 60 of them were for people who hade bought a computer and 60 for those who had bought a camera. A common rule of thumb in statistical data analysis is that each sample should contain at least 30 observations (Körner and Wahlgren, 2000), which is why we collected 30 samples of each of the variables woman-camera, woman-computer, man-camera and man-computer. The deliberate division of the sample into equal parts of men and women is called *quota sampling* (Bryman and Bell, 2003). The advantage of quota

sampling is that it makes sure that the sample will be distributed in the same way as the population. (Bryman and Bell, 2003; Holme and Solvang, 1997)

3.2.3 Sample bias

It could be argued here that even though men and women constitute equal parts of the population, this might not be the case for the population *people who shop for computers and cameras*, which is the population of interest in this thesis. Perhaps particularly not when purchasing products of technical nature. Here, it must be posited that men probably are overrepresented. For single households, there obviously exists no gender bias as there is only one individual that makes the purchase decision. But for families, there are reasons to believe that men have more influence on purchase decisions that involve products of technical nature. The authors admit that this is a valid criticism of the sample in this study, but argue that there are several reasons for choosing to divide the sample into quotas based on the gender criteria. The main argument here is that if the sample had not been divided into 50 per cent women and 50 per cent men, there would automatically have been more women in the sample, as they were generally more willing to accept to participate in the study (accordingly, the women quota was filled considerably faster than the one for men). On the other hand, the sample could not have had a larger quota of men, in a way that required a sample with larger percentage of men based on the assumption that a larger percentage of people buying computers and cameras are men. Such quotas would have been completely arbitrary. Some might argue that since there is suggestive evidence that support the conclusion that men buy more computers and cameras than women, the sample should reflect this and have a larger percentage of male respondents. The authors argue however, that since there is no actual figure that proves this, the most appropriate quota sizes in sample is to divide it into equal parts of men and women.

Other than gender, no other formal method of securing an unbiased sample was used. A sample can be biased in a number of ways relevant to our particular population. Consumption behaviour can be expected to differ between people based on demographic variables such as their age, income level, ethnicity, social group, where they live et cetera. In this study, no formal means of compensating for these differences were performed. However, the authors argue that differences resulting from these variables do not significantly influence the generalisability (Bryman and Bell, 2003) of the study, for reasons that will be discussed below.

The sample could be expected to be age-biased. Even though the questionnaire asked for the age of the respondent, this was not noted and the authors did not try to divide the sample into age quotas. Consequently, this resulted in an average age in the sample of 31 years, compared to 41 years (SCB, 2007) for the general population. The authors regard this bias as an acceptable statistical error, based on the relatively small sample in the study. Given the sampling method of approaching shoppers in a shopping mall, one can expect a different average age compared to the general population. Furthermore, with regards to the research area of this study, having a lower average age in the sample might not have a negative influence on the *relevance* of the study. Since the consumption behaviour of young people today could be seen as an indicator for how the consumption behaviour of the general public will look like in the years to come. Moreover, as our sample should be considered as a sample of a population that could be called *people who occasionally shop for computers and cameras*, rather than considered as a sample of the general population, this population might

very well have a lower average age compared to the general population. Therefore, our conclusion is that a possible age bias does not significantly influence the generalisability or relevance of the study.

Regarding the other demographic variables that might result in a sample bias, these can be a result of where the survey is conducted. The questionnaires were, as mentioned above, handed out in the shopping mall Nova Lund on the outskirts of Lund, on the 5-6 of May, 2008. In general, it is our opinion that the shoppers encountered on the days when the survey was performed could be considered fairly representative of the general population. It is the authors' subjective opinion that shoppers at Nova Lund are quite heterogeneous, and therefore the authors do not suspect a significant bias on income level or social group. As for where the shoppers live, it can be noted that Nova Lund is situated close to many major roads, attracting shoppers from a large region, and not only locals. Nova Lund is also easily accessible by local transportation, and thus also attracts shoppers who do not own a car. The only major question mark concerning the demographics of our sample is that since the study was performed on weekdays, the participants in the survey were for various reasons at the shopping mall during work hours. It is therefore possible that this could lead to an income level and social group bias. In defence of the study, many shoppers were actually lunch customers to the mall's food court, and during lunch hours we had a great deal of participants. Nevertheless, the authors concede that the sample might have been affected by having too few full-time working individuals.

3.2.4   Non response

Another possible source of sampling error is non-response (Bryman and Bell, 2003). This concerns possible differences in terms of what the survey measures between those who agree to participate and those who do not agree to participate. When we conducted our survey, our estimate of the number of people approached that declined to participate is approximately 70 per cent. Naturally we have asked ourselves whether or not this constitutes a major weakness on the study's generalisability. The only conclusion that can be made on this point is that it is impossible to draw any conclusions on potential differences between respondents and non-respondents in what our study measured. To our best knowledge, we can't see any particular reason to believe that there exist significant differences between respondents and non-respondents.

3.3   Questionnaire design

When designing the questionnaire, the guiding principle was to design the questionnaire so that it would be easy to fill out, yet provide us with a sufficient amount of data that would enable us to fulfil the purpose of the study. Therefore, quantitative measures were combined with open questions, in which the respondent could elaborate and explain their answers. Given the context in which the study was conducted, it could be expected that an extensive questionnaire covering multiple pages would most certainly decrease the respondent's ambition in giving a thoughtful answer to each and every question. The stressful environment of a shopping mall and the fact that nearly all of the shoppers had a limited amount of time to spend at the mall, we realized that the number of questions had to be kept at a minimum. Therefore, we decided to let the questionnaire cover a maximum of two pages.

Much to our pleasant surprise, most of the respondents seemed to put in considerable effort into filling out the questionnaire, and there where no incomplete questionnaires. As expected, many respondents were initially reluctant to filling out the questionnaire and asked on repeated occasions how much time it would take. Our response to that question was "just a couple of minutes, 3 or 4 perhaps", which seemed to be a reasonable amount of time to spare by most respondents. This became an underestimation after a while as it turned out that the average time for a respondent to complete the questionnaire was approximately 6-7 minutes. Based on the apparent simplicity of the questionnaire as well as judging from the answers given to the open questions, we conclude that most respondents really did make an effort to answer our questions thoroughly and honestly.

3.3.1 Closed questions

Apart from the categorizing questions gender, where the product had been bought, whether or not Internet search had been carried out and whether or not they knew about Internet discussion forums, there were four questions in the form of statements in the questionnaire. The main one took up nearly half of the first page, and it was a question where the respondent was asked to rank the importance of various types of information sources. Translated into English: the question was:

"When you were deciding on what computer to buy, how much influence would you say that the information sources below had on your decision?"

In this question, the respondents were asked to rank no less than nine different types of information sources[1]. Bryman and Bell (2003) recommends that fixed answers should be arranged vertically, as this decreases the risk for confusion on what box to tick, and it more clearly distinguishes questions from answers. In our questionnaire, this option was not feasible, due to the fact that there were nine different information sources to rank. If each information type would have had a Likert scale arranged vertically, this would take up considerably more space and therefore probably had increased the likelihood of the respondent rushing through the questions, giving less thought to each question. Instead, the answers were arranged horizontally, with a 6-point Likert scale, ranging from "big influence" to "no influence at all". Note that a 6-point Likert scale was used instead of 5 or 7, and the reason for this was that by having a "neutral" answer in the middle, this would tempt many respondents to choose that, thus not giving us a chance to interpret their answer in any direction.

The second closed question in the questionnaire was *"How likely would you say it is that you will search for information on an online discussion forum, next time you set out to buy a technical gadget?"* This question attempted to measure attitudes towards electronic word-of-mouth, as described in the previous chapter. Unfortunately, this question in retrospect was poorly formulated, as it received a very high rating (here, the Likert scale was from 6 (Very likely) to 1 (Not at all likely)). It could be considered as somewhat leading; as it "appears to lead the respondent in a particular direction" (Bryman and Bell, 2003, p. 165). We suspect that given the fact that the question presents the hypothetical situation of a future purchase, it must be regarded with some scepticism compared to the other questions that concerned an actual purchase. However, this is not to say that we will disregard from this question

---

[1] How the nine types were selected is explained in the theoretical framework section.

completely later on in the analysis, only that its implications can not be considered as strong as the other questions.

The third and fourth of the statement-questions was the two statements *Internet is a good way to find out more about products you intend to buy* and *Internet is a good way to find out more about products you have already bought*. These questions were intended to illuminate possible differences between Internet's role as a pre-purchase tool and the role as an after-purchase information source. The reasoning behind this was that even though the study was limited to pre-purchase search, this question was intended to provide a possible confirmation that consumers see the Internet more as a pre-purchase information source rather than an after-purchase information source. However, for the same reason as discussed above on question two, these questions were somewhat leading and it is our suspicion that respondents may have exaggerated in their responses to this question.

3.3.2 Open questions

Open questions were used in those cases where the authors for various reasons did not want to provide coded answers, or were unable to. The main advantage of having open questions is that the respondent can come up with an answer on its own and is not forced to choose from a number of pre-selected answers provided by the researcher. Using open questions may provide the researcher with unexpected answers, and given this study's new and relatively poorly explored subject, the authors decided that some questions had to be left open or order to allow for unexpected answers. In our questionnaire, this was particularly important for the question "What kind of information did you search for on the Internet?", as we did not expect ourselves to account for any possible answer if a closed question was to be constructed. Naturally, open questions make it difficult and sometimes impossible to codify the answer (Bryman and Bell, 2003), but this was considered an acceptable disadvantage.

4 Results

In this section, the results from the survey will be presented, in the same order as they had in the questionnaire. As previously mentioned, of the 120 respondents there where no unusable questionnaires with regards to the closed questions. Some respondents did not answer some of the open questions however. For the statistical data analysis, SPSS for Windows were used.

4.1 Data from the closed questions

4.1.1 The sample's age distribution and average product price

The mean age of the sample was 30.98 years. For women the mean age was 31.33 and for men 30.63. The standard deviation was slightly higher for women, 12.73 years, compared to 11.42 years for mean, which meant that for the total sample the standard deviation was 12.05 years. The median age was 26 years for women and 25 years for men.
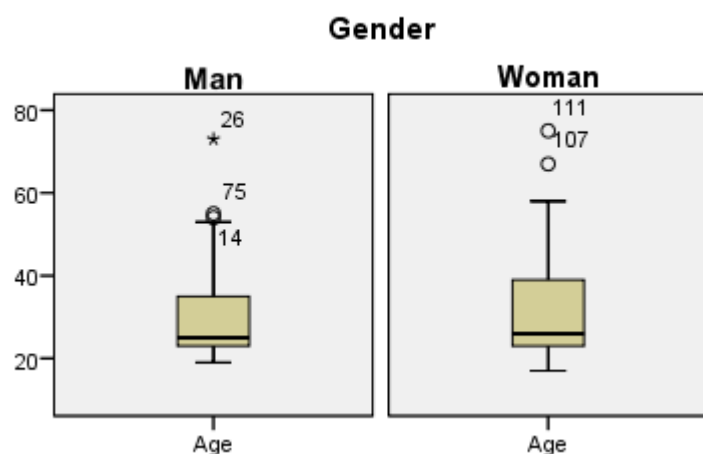

Figure 1. The sample's age distribution.

The mean price paid by the respondents who had bought a computer was 11 165 SEK, compared to 3 690 SEK for cameras, with a median of 10 000 SEK and 3 000 SEK, respectively

4.1.2 Where the product was purchased

Where the product was purchased		
	Online	Retail store
Camera	25.4 %	74.6 %
Computer	32.2 %	67.8 %
Men	35.6 %	64.4 %
Women	22.0 %	78.0 %
Total	28.8 %	71.2 %

Table 2. Where the product was purchased.

We see here that 35.6 % of the men purchased online compared to 22 % of the women. However, when this difference was tested using an independent-samples t-test, the p-value was 10.6 %, which leads us to conclude that the difference between men and women in whether or not they shop online is not statistically significant. Although the difference is not statistically significant, we argue that the p-value is low enough to raise the suspicion that there indeed is a difference and that a higher percentage of men purchase cameras and computers online than women. More cameras than computers were bought in a retail store, but the difference of 6.8 percentage points between cameras and computers received a p-value of 42 % in the t-test, and therefore this difference is not statistically significant.

4.1.3   Proportion that searched for information online

The next question was "Did you search for information online in connection to your purchase?".

Did you search for information online in connection to you purchase?		
	Yes	No
Camera	75 %	25 %
Computer	68.3 %	31.7 %
Men	83.3 %	16.7 %
Women	60 %	40 %
Total	71.7 %	28.3 %

Table 3. Proportions of the respondents that searched for information online.

Again, we see in this question a difference between men and women. 83.3 percent of the men had searched for information online compared to 60 % of the women. In this case however, the difference between men and women shows a strong statistical significance, with a p-value of 0.4 %. Thus we are able to conclude that men more often searches for information online before a purchase of a camera or a computer than women, and this difference is statistically significant at the 5 % level.

The difference in whether or not Internet search were performed between the two product types is much lower – 6.7 percentage points. An independent samples t-test produced a p-value of 42.2 %, which means that we are unable to draw any conclusions in whether or not there is a difference between consumers who buy cameras and consumers who buy computers.

4.1.4   Ranking of different kinds of information sources

The dominant question on page one of the questionnaires was "When you were deciding on what computer to buy, how much influence would you say that the information sources below had on your decision?". In this question, the respondents were to rank nine different kinds of information sources with regards to their relative importance. The scale went from 1 (no influence at all) to 6 (big influence). The results are shown in the table below.

Information source ranking (1 = Lowest, 6 = Highest)	
Information source	**Mean**
Advice from family, friends, and other acquaintances	4.03
Independent expert reviews online	3.23
Manufacturer's website	3.14
Salesperson/store clerk I spoke with	3.10
Reseller's website	3.07
In-store information	2.99
Advice from other private persons online (e.g. from discussion forums or blogs)	2.81
Consumer information (e.g. newspaper articles, *Råd & Rön*, the TV program *Plus*)	2.67
Commercials (TV, newspapers, radio, billboards etc.)	2.34

Table 4. The respondents' ranking of the influence of different information sources on their purchase decision.

As is evident from the table, the information source *advice from family, friends and other acquaintances* received a significantly higher score than other sources of information. It is also noteworthy that according to our respondents, the information source influencing them the least was commercials.

Information source ranking: gender differences

Ranking of different information sources					
	Mean men	Mean women	Mean difference	P-value	Statistical significance at the 5 % level
Commercials (TV, newspapers, radio, billboards etc.)	2.30	2.38	0.08	75.7 %	No
Sales person/store clerk I spoke with	2.83	3.37	0.54	7.7 %	No
In-store information	2.73	3.25	0.52	5.9 %	No
Manufacturer's website	3.38	2.90	0.48	14.0 %	No
Reseller's website	3.10	3.04	0.06	84.0 %	No
Advice from family, friends, and other acquaintances	3.95	4.12	0.17	61.8 %	No
Advice from other private persons online (e.g. from discussion forums or blogs)	3.33	2.26	1.07	0.1 %	Yes
Consumer information (e.g. newspaper articles, *Råd & Rön*, the TV program *Plus*)	2.70	2.64	0.06	85.3 %	No
Independent expert reviews online	3.62	2.83	0.79	1.4 %	Yes

Table 5. The differences in how men and women ranked information sources.

There is a significant difference in two variables – advice from other private persons online and independent expert reviews online. Both of these were considered more important by men. However, it is worth noting that two variables came close to the 5 % level – sales person/store clerk and in-store information. Both of these were ranked higher among women than men.

26

Information source ranking: product differences

Ranking of different information sources					
	Mean computers	Mean cameras	Mean difference	P-value	Statistical significance at the 5 % level
Commercials (TV, newspapers, radio, billboards etc.)	2.18	2.50	0.32	23.8 %	No
Sales person/store clerk I spoke with	2.90	3.30	0.40	18.6%	No
In-store information	3.03	2.95	0.08	76.2 %	No
Manufacturer's website	3.22	3.07	0.15	65.6 %	No
Reseller's website	3.14	3.00	0.14	67.6 %	No
Advice from family, friends, and other acquaintances	4.29	3.78	0.51	13.4 %	No
Advice from other private persons online (e.g. from discussion forums or blogs)	2.92	2.69	0.23	49.7 %	No
Consumer information (e.g. newspaper articles, *Råd & Rön*, the TV program *Plus*)	2.32	3.03	0.71	3.0 %	Yes
Independent expert reviews online	3.08	3.38	0.30	36.1 %	No

Table 5. The differences in how camera buyers and computer buyers ranked information sources.

The highest ranked information source among both camera and computer buyers is advice from family, friends, and other acquaintances, albeit the computer buyers ranked this considerably higher. The P-value of this difference is 13.4 %, which means that the difference is not statistically significant, but still much higher than most of the other differences. Hence, computer buyers seem to trust the advice of friends and family more than buyers of cameras. The camera buyers on the other hand, rank *sales person/store clerk I spoke with* and *consumer information (newspaper articles etc.)* higher than computer buyers, the latter even being statistically significant. Remember that more cameras than computers were purchased in a retail store, and this corresponds well with the fact that camera buyers rank advice from store personnel higher in how much they influenced their purchase decision.

4.1.5 Awareness of online discussion forums

The first closed question on page two of the questionnaire was "Did you know that there are discussion forums on the Internet, where people can exchange experiences with others about computers/cameras they have bought? The purpose of this question was simply to test how well-known online discussion forums are, as they constitute a fundamental part of the electronic word-of-mouth, eWOM. 72 respondents, or 60 % of the sample, answered yes to this question. Of these 72, 44 were men and 28 women. In other words, 73 % of men knew about online discussion forums compared to just 47 % of the women. This difference was

tested in an independent samples t-test, which produced a P-value of 0.3 %, i.e. there is a strong statistical significance.

4.1.6 Attitudes towards online discussion forums

The second closed question on page two, the respondent were asked to rank "How likely would you say it is that you will search for information on an online discussion forum, next time you set out to buy a technical gadget?", on a Likert scale. The scale ranged from "Very likely" to "Not at all likely", and between the two extremes the respondent had six boxes to tick. The answers were then ranked as 6 for the box closest to "very likely", to 1 for the box closest to "Not at all likely". The mean for the total sample was 3.71, with a mean of 4.19 for men compared to 3.24 for women. This difference of 0.95 proved to be statistically significant, with a P-value of 0.6 %.

4.1.7 Summary

In this section, the results from the closed questions of the questionnaire were presented. The main points presented in this chapter were:

- Men seem to purchase cameras and computers online more often than women (not statistically significant at the 5 % level – p-value 10.6 %).
- 83.3 % of the men had searched for information online in connection to their purchase compared to 60 %, and this difference were statistically significant at the 5 % level (p-value 0.4 %).
- The highest ranked information source is *advice from family, friends and other acquaintances*, which received a score of 4.03 on a 6-point scale. The lowest ranked information source was commercials, which received a score of 2.34.
- When this ranking were tested for differences between men and women, a statistically significant difference was found in how *advice from other private persons online* and *independent expert reviews online*, both higher ranked by men (p-value 1.4 % and 0.1 %, respectively).
- Although not statistically significant, women ranked *in-store information* and *salesperson/ store clerk* higher than men (p-value 5.9 % and 7.7 %)
- When the information source ranking was tested for differences between camera buyers and computer buyers, the only statistically significant difference was *consumer information (e.g. newspapers)*, which were higher ranked by camera buyers.
- More men than women know about online discussion forums, 73 % compared to 47 % among women (statistically significant, p-value 0.3 %)
- Men consider it more likely than women that they will look for information on internet discussion forums next time they are about to buy a technical product (average score on a 6-point scale was 4.19 for men compared to 3.24 for women).

4.2   Data from the open questions

Here, the authors will summarize the most common answers given to those open questions that proved to have the most importance for our discussion. Since no statistical analysis was carried out based on the results of these questions, the results from men/women and camera buyers/computer buyers are not presented separately.

1.   *What kind of information did you search for on the Internet?*

Information on the price was one of the most mentioned types of information that the respondents searched for. 45 respondents mentioned price. In addition, 46 respondents had searched for information on functional attributes, such as performance, technical data, and other general information. 28 respondents mentioned some kind of subjective information, both expert reviews as well as consumer feedback.

2.   *What websites did you visit?*

Price comparison sites such as pricerunner.se (33) and prisjakt.nu (8) were mentioned. It is important to point out here that these sites are also sources of subjective information in the form of expert reviews and consumer feedback. From these answers, it is difficult to assess how many respondents that visited the price comparison sites with the intention of finding subjective information. 43 respondents mentioned some kind of reseller website, for example Netonnet, Siba, Elgiganten or Cyberphoto.

3.   *What advantages do you see with searching for information online about products you think about buying?*

57 respondents mentioned information accessibility (simplicity, easy access, effectiveness) as an advantage with Internet search. 36 respondents saw the amount of information as an advantage. The ability to quickly gain an overview and making comparisons was also mentioned by several respondents. Some respondents expressed a relief from the fact that Internet had reduced their dependence on sales persons. More obscure answers include the Internet as an environmentally friendly way of searching for information.

4.   *What disadvantages do you see with searching for information online about products you think about buying?*

The most frequently mentioned disadvantage with Internet search was some kind of scepticism towards the credibility of the information, which 46 respondents mentioned. 15 respondents thought that the information online was difficult to find. A few respondents missed the ability to "touch and feel" the product they were interested in, and some saw the absence of personal feedback as a disadvantage.

5 Discussion

5.1 Gender differences

Is there a difference between men and women with regards to Internet search behaviour?

In our survey, 83 % of the men had searched for information online, compared to 60 % of the women. This corresponds to Losh (2003), who posited that men are more likely than women to engage in online activities on a regular and frequent basis. The reason behind this difference has been suggested to be a result of a number of different circumstances. Men tend to be more interested in computers than women (Kim et al., 2006), a higher overall interest in technology among men, as well as better access to computers. Thus, even though men could be expected to be less thorough in their information search than women (Kim et al., 2006) and more confident in their own judgement, they still constitute the majority of consumers looking for information online. On the other hand, given the fact that men are more interested in technology than women, perhaps the difference could have been expected to be much higher.

Raman (1997) underlined the importance of the consumer's need to trust the information source. Given that the information on the Internet may be complex, possibly biased and at the same time difficult to find, Internet requires the consumer to be somewhat knowledgeable with regards to computers and technology. Combined with the fact that men tend to be more interested in technology and computers than women (Shashaani, 1997), it could be argued that men in general are better equipped in finding relevant information online. Our findings support this suspicion. The result from the question where respondents ranked different kinds of information sources provides further understanding on the differences between men and women. Of the four online-based information sources, three were considerably higher ranked by men as having had an influence on their purchase decision. These three were *advice from other private persons online*, *independent expert reviews online* and *manufacturer's website*. Hennig-Thurau et al, (2004) note that these type of information sources are about describing experiences of a product or discussing the problem-solving information. Thus, online sources' influence on the purchase decision was consistently ranked higher among men compared to women. We argue that the most probable explanation of this fact is since men in general have a better general knowledge of computers; they can overcome the potential difficulties with finding the information that is being sought after.

Another finding that supports this argument is the result of the question "Did you know that there are discussion forums on the Internet, where people can exchange experiences with others about computers/cameras they have bought?" 73 % of the men answered yes to this question, compared to 47 % of the women. This was further supported from the information source ranking, which showed a significant difference how men ranked the importance of *Advice from other private persons online* higher than women. Our results therefore provides strong support for the conclusion that not only does men have a better knowledge of what information to be found online, they also put this information to use in their purchase decisions. However, this conclusion must be contrasted with Kim et al.'s (2007) description of how gender affects the extent of the search:

> *"[…] males had a tendency not to process all available information as a basis for judgement. Instead, they relied more on their own opinions. As a result, males made decisions more quickly than females, relying on only highly available information"*
> Kim et al. (2007, p. 425)

Our findings contradict this statement. When buying computers and cameras, men seem to be more willing to search for information that may not be easy to obtain. A possible explanation for this could be that men in general are probably more interested in the product categories computers and cameras than women, and therefore undertakes a more thorough information search, which would conform to Jepsen's (2007) findings. Nevertheless, even though the two kinds of products investigated in this thesis might attract more interest from men than women, we argue that when it comes to high-involvement purchase decisions, it must be questioned that most men relies on only highly available information, as well as being less risk-avert than women. Our findings suggest that men might very well be more thorough in their information search.

At this point we have established that men rank Internet higher as a pre-purchase information source than women, and that this comes from the fact that men in most cases are more proficient with computers and Internet, and therefore they know how to find relevant information, which may be difficult to obtain. Not all our data provided evidence of gender differences however. An important finding to point out here is that in our survey, there was no statistically significant difference between how men and women ranked the information source *advice from family, friends and other acquaintances*. These were ranked 3.95 by men and 4.12 by women on a six point scale. If men to a larger extent rely on electronic word-of-mouth, this is certainly not the case with traditional word-of-mouth. Although, Hennig-Thurau et al., (2004) found that eWOM effects on consumers may be very similar to WOM effects. Furthermore, people participating in eWOM have similar motivations as people interacting in traditional WOM.

The absence of a difference between men and women in how much influence friends and family had on their purchase decision is notable compared to the difference in how advice from other persons online was ranked. This leads up to the question of why men and women rank advice from friends and family more or less the same. As found in the quotation above, theory suggests that men in general tend to rely on their own opinion; therefore we expected advice from friends and family to be ranked higher by women.

If men ranked online information sources as having higher importance for their decision than women did, the opposite can be said about the influence from the retailer. Women ranked *salesperson/store clerk I spoke with* and *in-store information* higher than men did. The difference was not statistically significant however (p-values 7.7 % and 5.9 %, respectively), but still low enough to raise a suspicion. Our findings thus suggest that more women rely on the advice of a store salesperson than men. This supports the previously mentioned argument that men trust their own judgement to a greater extent than women. Another possible explanation can be found in Jepsen (2007), who noted that the lack of physical contact with sales staff when searching for information online is seen by some as a benefit, whereas others like to have contact with sales personnel. It is possible that the former category is dominated by men, whereas the latter is dominated by women, which would explain why women ranked salespersons as more important.

Furthermore, some researchers point to the fact that "women truly enjoy the shopping experience compared to their male counterparts" (Van Slyke et al., 2002, p. 83), which would

include the interaction with sales staff. This conclusion is supported in women's answers to the open questions in the questionnaire:

> *"The salesperson made a positive impression on me."* (Respondent 70, Woman, age 45)

> *"A personal contact is what matters the most for me. Gives me reality."* (Respondent 18, Woman, age 32)

> *"Store personnel are knows a lot if they're good"* (Respondent 95, Woman, age 24)

Our findings support the conclusion that women are more likely to trust the advice from a salesperson in the store than men.

5.2   Information types on the Internet

What type of information do consumers search for when they go online?

In the previous theory part, the distinction between objective and subjective information was described as particularly relevant when determining the usefulness of information on the Internet in consumer information search. The two kinds of products investigated in our study, computers and cameras, can be compared using both objective and subjective information. Both cameras and computers have several objective attributes. For computers, consumers may want to compare processor speed, physical characteristics, amount of hard drive space et cetera. For cameras, consumers may wish to compare different alternatives on attributes such as picture resolution, size, type of viewer screen, zoom capability et cetera. According to Grant (2007), Internet is particularly well-suited for comparison of objective information. On the other hand, computers and cameras also have subjective characteristics, such as a camera's picture quality or a computer's user friendliness.

In the survey, the respondents were asked: *If you searched for information on the Internet, what kind of information did you search for?*

Since this question was open, the answers were divided into three categories by the authors when the survey was completed. These were price, functional characteristics, and subjective information (customer and expert reviews, discussion forums). 45 respondents mentioned price, which could both mean that they already had decided upon which model or brand to buy and was simply looking for the reseller offering the chosen product at the lowest price, or that the respondent selected what computer or camera to buy based on the price. Functional characteristics were mentioned by 46 respondents, and subjective information was mentioned by 28 respondents. Hence, the most common type of information searched for online by consumers considering buying a camera or a computer is objective information such as price and functional attributes. This supports Grant's (2007) assertion that Internet is mainly used as a source of objective, search-type information, whereas consumers prefer offline sources for subjective information.

5.3   Product factors

Is there a difference in Internet search behaviour, depending on what kind of product that is being considered?

The two products used in our survey share many characteristics. They are both home electronics products, usually sold at the same resellers, and both are characterized by the fact that they have many functional, objective product attributes that can serve as a basis of comparison when evaluating alternatives. That is, they tend to be somewhat standardized. This would define them as search-type products, which means that consumers can base their choice on "hard data", provided by the retailer or the manufacturer.

However, our results provide some evidence for the assertion that cameras and computers should be considered experience-type products in some respects. Some researchers have found that consumers rank information from other consumers to be more important when shopping for experience-type products (Rha, 2002, in Bei, Chen and Widdows, 2004). This is also what we found in our survey: advice from family friends and other acquaintances was ranked 4.03 on the six-point scale, compared to manufacturer's website, salesperson, and reseller's website and in store information, which were ranked at 3.14, 3.10, 3.07 and 2.99, respectively. Therefore, even though computers and cameras may seem to be search-type products, our findings suggest that they could also be considered experience-type products, based on the fact that advice from friends and family was ranked as having the greatest influence on the purchase decision.

Table 6 in the results section illustrates the similarities between computers and cameras. The main interest for the authors with regards to the differences between cameras and computers was if the difference in price might influence the extent of search undertaken. Theory on the purchase decision process suggest that the more expensive product considered, the greater the financial risk, and therefore the consumer undertakes a more thorough information search in order to offset this risk. In our survey, this would imply that since computers had a much higher average price than cameras, more computer buyers would go online and search for additional information, compared to camera buyers. However, we found no support for this assumption, as the percentage of respondents that had searched for information online was basically the same between camera buyers and computer buyers; 75.0 % compared to 68.3 %. On the contrary, our data suggest that it is the other way around; more camera buyers search for information online than computer buyers, although this difference was not found to be statistically significant.

When testing how camera buyers and computer buyers ranked to influence of the different information sources, only one difference was found to be statistically significant, namely consumer information, which was higher ranked by the camera buyers. It cannot be ruled out that this difference is the result of a single, highly influential source, for example an article in a leading newspaper, or a comparative test on television. Nevertheless, a possible explanation why camera buyers tend to rely more on consumer information found in newspapers and on television is that cameras can be more easily evaluated on comparable criteria. For example, even though picture quality is not "hard data", a comparative test normally involves a rating on picture quality by the tester, enabling the reader to compare the alternatives based on their rating on picture quality.

A computer on the other hand, is much more complex and there are no good criteria that can be used as a basis for comparison. In comparative tests, the tester may rank computers on their performance in several different measures, but there are no single criteria that might be used to determine which is "best". Computers are simply too complex and their relative performance is based on so many different variables that it difficult to say whether one computer is better than the other. Theory suggests that the more complex the product, the more people rely on the advice of others, that is word-of-mouth. Our results indeed indicate a difference in how the buyers of computers ranked the importance of advice from friends and family compared to how this was ranked by the camera buyers. Computer buyers ranked advice from friends and family at 4.29 compared to 3.78 for camera buyers. The difference may not be statistically significant, but the p-value of 13.4 % still provides some support for the conclusion that advice from friends and family is more important for computer buyers than for camera buyers. The authors argue that the most probable reason for this difference is that the greater complexity of computers makes it more difficult for the consumer to make a decision on its own.

Furthermore, a third difference to point out in the ranking question is the influence by a salesperson, which was ranked higher by people who had bought cameras (3.30) compared to computer buyers (2.90). The p-value of 18.6 % does not make this difference statistically significant, but it does provide us with some support for the assertion that the salesperson is more important for camera buyers. The lower average price for cameras means that there is less financial risk. Less financial risk may lead to more purchase decisions being made in the store, and here the salesperson becomes more important.

5.4 Attitudes towards Internet search

What are the general attitudes and opinions of consumers towards Internet as a pre-purchase information tool?

The last two open questions in the questionnaire explored consumers' views on the advantages and disadvantages of using the Internet as a pre-purchase information tool. The intention was to get an overall view of the general attitudes and opinions towards the Internet. The nature of the question did not allow for any quantitative data to extracted, instead the intention was to provide us with additional data which may not have been disclosed from the other questions.

The results in our survey showed that consumers find information from the Internet to be highly accessible. The reason for this accessibility was a result of the large variety of websites and how easily consumers could find information not only from domestic sources but also from websites across the world. However, many respondents were mentioning the disadvantage of how trustworthy the information is on the Internet. Another respondent criticized the questionable objectivity of the information and that they sometimes felt mislead by the sources online. For instance, the advice they got from discussion forums and blogs were sometimes hard to trust due to the lack of independence from the information sources. These arguments correspond to Grant et al. (2007), who argue that the reason why some consumers prefer offline "subjective" information instead of online information may be possibly due to the risk of using unidentified sources. Nevertheless, the second closed question in our questionnaire on page two, showed a mean value of 4.19 for men compared to 3.24 for women. There is statistically significant that men are more willing to use discussion forums than women. The authors may therefore draw the conclusion from the discussion forums that women view the Internet with more distrust.

The reason behind this difference is a result of a number of different factors. But one factor that the authors want to emphasize more than the other is the difference in technology adaptation, and how this difference corresponds with the availability and trust of the information sources online. The explanation for this difference was summarized by Shashaani (2007), who argued that there is a difference in technology adaptation and men tend to be more interested in computers than women.

Furthermore, Jepsen (2007) believe that consumers with more knowledge about Internet and the product will feel better equipped to select among the quantities of information available on the Internet. These two sentences explain very well the difference between women and men when it comes to the attitudes towards Internet. Men are more willing to trust the information sources online because they know better where to find the available information. They are more familiar with the technology and have the appropriate skills how to use the information sources. That is the most rational explanation why women tend not to trust the information available on the Internet. From the ranking of different information sources in our survey, both offline and online, the authors also find a statistically significant difference between men and women. In the section about advice from other persons online (e.g. from discussion forums or blogs) the difference gives a p-value of 0.1 %. Furthermore, some quotations from our survey are in line with this reasoning:

"If you search on the "right" websites, there are no disadvantages in my opinion." (Respondent 28, man, age 36)

"You cannot ask someone if you do not find what you are searching for." (Respondent 57, woman, age 42)

"Cannot find what I am looking for." (Respondent 3, woman, age 53)

The results from the questionnaire indicated also that consumers prefer objective information, and mentioned this type of information as an appropriate advantage connected to information search online. This conclusion is supported in the answers to the two last questions in the questionnaire:

"Easy to find the lowest price, to get the most of my money." (Respondent 23, man, age 20)

"It is easy and cheap to compare producers, models, brands and price." (Respondent 10, man, age 32)

"Compare prices, objective information." (Respondent 44, woman, age 49)

The quotes mentioned above show that most respondents in our survey are more willing to search for objective information than subjective information. The reason discussed earlier in this chapter about how trustworthy the Internet is as an information source, may be one explanation. This explanation is best understood by explaining another open question in our survey. The respondents answered specifically also on what websites they had visited and a lot of respondents answered websites such as Pricerunner, Prisjakt and Sweclockers. These websites handle objective information and the authors therefore also conclude that consumers prefer objective information on the Internet. Therefore, women are able to trust the objective information but are less trustful when it comes to the subjective information. This corresponds with the ranking of different information sources in our survey. In the section about independent expert reviews online, the mean value of men was 3.62 compared to 2.83 of women, with a statistically significant p-value of 1.4 %.

6 Conclusions

6.1 General findings

This study took a general stance in describing how Internet influences the search behaviour among Swedish consumers. Our findings provided us with several interesting insights from the different perspectives that were used to approach the subject.

From the gender perspective, our findings showed both similarities as well as differences between men and women in their search behaviour. We found that there where no difference between men and women when it comes to the influence of friends and family (word-of-mouth), on their purchase decision. More men than women went online to search for information and the information online had a higher influence on men's purchase decision than it had for women. We argue that the most likely explanation for this observation is a higher product interest, coupled with men in general being better able to find relevant product information online, as a result of better technical proficiency. The important point to be made here is that it cannot always be assumed that men will be less thorough in their search than women as a consequence of men being less risk-avert and relying of their own judgement, as is suggested by some researchers.

Women, on their hand, undertook fewer searches online, were less influenced by online sources and instead showed an inclination to be more influenced by commercial sources than men. This could of course be attributed to the lower product interest, but the authors suggest a further explanation of this finding. The lack of physical contact when searching the web may have a negative effect on women in particular with regards to the shopping experience. As previous literature suggested that women enjoy the shopping experience itself, we suggest that this fact makes them less motivated to search the web for product information.

Furthermore, Swedish consumers use the Internet mainly to search for objective information such as on price and functional attributes. The price comparison site *Pricerunner.se* was the most frequently mentioned website that the respondents had visited. A large number of respondents answered that they searched for information on functional characteristics. We are therefore able to confirm other studies' findings that Internet is mainly used for search for objective information. Our findings indicate that the main reason behind this is that when it comes to subjective information, people do not always feel that they are able to trust what is being said online.

Our study also investigated differences in the search behaviour between people who had bought either a camera or a computer. Even though there was a significant price difference between these two product types, this had no effect on whether or not Internet search was performed. In general, we did not find any significant difference between camera buyers and computer buyers in their search behaviour. Nevertheless, computer buyers ranked the importance of friends and family higher than camera buyers, and we argue that this is a result from computers being a more complex product. Camera buyers on their hand were more influenced by a salesperson, as a result of a less product complexity and lower financial risk. Moreover, camera buyers were more influenced by public sources (consumer-rating organizations), which we argue is a result of cameras being easier to compare than computers.

Finally, our survey probed the general opinions and attitudes towards searching for product information online. These findings confirm much of what we already have established. Consumers find the most positive aspect of the Internet to be the availability and accessibility of information. Internet enables them to get a quick overview of what interest them, thus making it easier to find what is available on the market. As we described in the introduction, before the Internet companies had an information advantage against the consumer. Here, the Internet represents a power shift from companies to the consumers, strengthening their bargaining power.

However, consumers are still sceptical towards online information search, pointing out two major issues. Firstly, many consumers find it difficult to find relevant product information online. Given the vast amount of information available, consumers sometimes find it difficult to find what is relevant for them. Secondly, many consumers are sceptical towards the credibility of the information online. This is particularly true for subjective information sources, which many respondents were sceptical towards from the fact that it is difficult to know whether the information is unbiased or not.

6.2   Limitations of the study

As we only have investigated consumers' search behaviour when purchasing home electronics products, we do not claim our findings to be generalizable beyond this context. The nature and extent of Internet search may differ significantly if other high-involvement product types were examined, for example cars or fashion. We therefore claim that our findings' main contribution is to the understanding of consumer behaviour on the home electronics market.

Furthermore, even though several measures were used to make our sample more representative, some limitations on the generalisability of our findings deserve attention. As with all non-probability sampling, there is less generalisability than what would have been the case had we used probability sampling. A key demographic that was underrepresented in our sample was middle-aged men, and given the purchasing power of this group, we concede that this might have a negative influence of the generalisability of our findings.

References

Alba J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., Wood, S. (1997). Interactive Home Shopping: Consumer, Retailer and Manufacturer Incentives to Participate in Electronic Marketplaces. *Journal of Marketing, 61*, 38-54.

Alba, M., and Hutchinson, W. (1987). Dimensions of Consumer Expertise. *Journal of Consumer Research, 13*(4), 411-454.

Armstrong, G., and Kotler, P. (2002). *Marketing: An Introduction* (6th ed.). Upper Saddle River, New Jersey: Pearson Education.

Bei, L-T., Chen, E.Y.I, and Widdows, R. (2004). Consumers' Online Information Search Behavior and the Phenomenon of Search vs. Experience Products. *Journal of Family and Economic Issues, 25*, 449-467.

Bickart, B., and Schindler, R.M. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing, 15*(3), 31-40.

Bloch, P.H., Sherrell, D.L., and Ridgway, N.M. (1986). Consumer Search: An Extended Framework. *Journal of Consumer Research, 13*(1), 119-126.

Bone, P.F. (1995). Word-of-mouth effects on short-term and long-term product judgments. *Journal of Business Research, 32*, 213-224.

Bryman, A., and Bell, E. (2003). *Business Research Methods*. Oxford University Press.

Chaudhuri, A. (2000). A macro analysis of the relationship of product involvement and information search: The role of risk. *Journal of marketing theory and practice, 8*(1), 1-14.

Darley, W.K., and Smith, R.E. (1995). Gender differences in information processing strategies: An empirical test of the selectivity model in advertising response. *Journal of Advertising, 24*(1), 41-59.

Dubois, B. (2000). *Understanding the Consumer: A European Perspective*. London: Prentice Hall Europe.

Grant, R., Clarke, R.J., and Kyriazis, E. (2007) A review of factors affecting online consumer search behaviour from an information value perspective. *Journal of Marketing Management, 23*, 519-533.

Gruen, W. T, Osmonbekov, T., and Czaplewski, A.J. (2005). eWOM: The impact of customer-to-customer online know-how exchange on customer value and loyalty. *Journal of Business Research, 59*, 449-456.

Hagel J, Armstrong AG. (1997). *Net gain: expanding markets through virtual communities*. Boston, MA: Harvard Business School Press.

Hennig-Thurau T., Gwinner, K.P., Walsh, G., and Gremler, D.D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing, 18*(1), 38-52.

Holme, I. M., and Solvang, B. K. (1997). *Forskningsmetodik – Om kvalitativa och kvantitativa metoder*. Lund: Studentlitteratur.

Jepsen, A.L. (2007). Factors affecting consumer use of the internet for information search. *Journal of Interactive Marketing, 21*(3), 21-34.

Kim, D.Y., Lehto, X.Y., and Morrison, A.M. (2007). Gender differences in online travel information search: Implications for marketing communications on the Internet. *Tourism Management, 28*, 423-433.

Klein, L.R. (1998). Evaluating the potential of interactive media through a new lens: Search versus Experience goods. *Journal of Business Research, 41*, 195-203.

Klein, L.R., and Ford, G.T. (2003). Consumer search for information in the digital age: An empirical study of pre-purchase search for automobiles. *Journal of Interactive Marketing, 17*, 29-49.

Körner, S., and Wahlgren, L. (2000). *Statistisk Dataanalys*. Lund: Studentlitteratur.

Kozinets, R.V. (1998). On Netnography: Initial Reflections on Consumer Research Investigations of Cyber culture. *Advances in Consumer Research, 25*, 366-371.

Kozinets, R.V. (2002). The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research, 39*, 61-72.

Krugman, H. E. (1966). The measurement of advertising involvement. *Public Opinion Quartely, 30*, 583-596.

Losh, S.C. (2003). Gender and educational digital chasms in computer and Internet access and use over time: 1983-2000. *IT&Society, 1*(4), 73-86.

Raman, N.V. (1997). A qualitative investigation of web browsing behaviour. *Advances in Consumer Research, 24*, 511-516.

Richins, M.L. (1983). Negative word-of-mouth by dissatisfied consumers: A pilot study. *Journal of Marketing, 47*, 24-32.

SCB (Statistics Sweden), (2007). *Befolkningens medelålder i riket efter kön. År 2000-2007*. Retrieved May 12, 2008, from http://www.ssd.scb.se/databaser/makro/start.asp

Shashaani, L. (1997). Gender differences in computer attitudes and use among college students. Journal *of Educational Computing Research, 16*, 37-51.

Solomon, M., Bamossy, G., and Askegaard, S. (1999). *Consumer Behaviour: A European Perspective*. London: Prentice Hall Europe.

Trost, J. (2001). *Enkätboken*. Lund: Studentlitteratur.

Underhill, P. (2006). *Why we buy – Shopping som vetenskap*. Västerås: Forma Publishing Group.

Van Slyke, C., Comunale, C. L., and Belanger, F. (2002). Gender differences in perceptions of Web-based shopping. *Association for Computing Machinery, Communications of the ACM, 45*(8), 82-86.

Wasserman, I.M., and Richmond-Abbott, M. (2005). Gender and the Internet: Causes of variation in access, level, and scope of use. *Social Science Quarterly, 86*, 252-270.

WII (World Internet Institute), (2008). *Internet och bredband i svenska hushåll*. Retrieved on 2008-05-19. Available for download at http://www.wii.se/content/view/111/37/lang,se/

Wolfinbarger, M., and Gilly, M. (2001). Shopping online for freedom, control and fun. *California Management Review, 43*, 34-53.

Yoon S-J., and Kim, J-H. (2001). Is the Internet more effective than traditional media? Factors affecting the choice of media. *Journal of Advertising Research, 41*, 53-60.

Appendix 1. The questionnaire

Kön: □ Man   □ Kvinna

Ålder: _____

Hur mycket kostade datorn? _____kronor

Vad var anledningen till att du köpte en ny dator?

□ Den gamla hade gått sönder
□ Den gamla hade blivit omodern/uppfyllde inte längre mina behov
□ Jag hade ingen dator sedan tidigare
□ Jag ville köpa ytterligare en dator

Vad var huvudanledningen till att du köpte just den dator som du köpte?

_____

Köpte du din dator på Internet eller i en vanlig butik?   □ Internet   □ Vanlig butik

Sökte du information på Internet i samband med ditt datorköp?   □ Ja   □ Nej

Om ja, vad för slags information sökte du på Internet?

_____

Vilka hemsidor besökte du?

_____

När du skulle besluta dig för vilken dator du skulle köpa, hur stor påverkan skulle du säga att nedanstående informationskällor hade på ditt beslut?

Reklam (TV, tidningar, radio, på stan etc.)	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Säljare/butiksrepresentant jag pratade med	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Information i butiken	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Datortillverkarens hemsida	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Återförsäljarens hemsida	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Råd från familj, vänner och andra bekanta	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Råd från andra privatpersoner på nätet (t.ex. från diskussionsforum eller bloggar)	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls
Konsumentinformation (t.ex. tidningsartiklar, *Råd & Rön*,	Stor påverkan	□	□	□	□	□	□	Ingen påverkan alls

tv-programmet *Plus*)

Oberoende expertrecensioner på nätet Stor påverkan □ □ □ □ □ □ Ingen påverkan alls

Vad var den främsta anledningen till att ovanstående informationskälla hade störst betydelse för dig vid ditt köp av dator?

_____

_____

Kände du till att det finns diskussionsforum på nätet där man kan utbyta erfarenheter med andra om datorer man köpt? □ Ja   □ Nej

Hur troligt skulle du säga det är att du själv skulle gå in och söka information på ett diskussionsforum, nästa gång du skall köpa en teknisk pryl?

Mycket troligt □ □ □ □ □ □ Inte alls troligt

Hur ställer du dig till följande påståenden?

Internet är ett bra sätt att ta reda på mer om produkter man tänkt köpa:	Håller med	□ □ □ □	Håller inte alls med	□ Vet ej
Internet är ett bra sätt att lära sig mer om produkter man redan köpt	Håller med	□ □ □ □	Håller inte alls med	□ Vet ej

Vilka fördelar ser du med att söka information på Internet om produkter man tänkt köpa?

_____

_____

Vilka nackdelar ser du med att söka information på Internet om produkter man tänkt köpa?

_____

_____

Tack för din medverkan!

Appendix 2. Translation of the questionnaire into English

Gender: □ Male   □ Female

Age: _____

How much did the camera cost?   _____SEK

What was the reason for buying a new camera?

□ The old one did no longer work
□ The old one had become obsolete/did not fulfill my needs anymore
□ I had no camera before
□ I wanted to buy an additional camera

What was the main reason for buying specifically the one camera which you bought?

_____

Did you buy your camera online or in a regular store?   □ Online   □ Regular store

Did you search for information on the Internet in connection to your purchase?
□ Yes   □ No

If yes, what kind of information did you search for on the Internet?

_____

What websites did you visit?

_____

When you were deciding on what computer to buy, how much influence would you say that the information sources below had on your decision?

Commercials (TV, newspapers, radio, billboards etc.)	Big influence	□	□	□	□	□	□	No influence at all
Salesperson/store clerk I spoke with	Big influence	□	□	□	□	□	□	No influence at all
In-store information	Big influence	□	□	□	□	□	□	No influence at all
Manufacturer's website	Big influence	□	□	□	□	□	□	No influence at all
Reseller's website	Big influence	□	□	□	□	□	□	No influence at all
Advice from family, friends, and other acquaintances	Big influence	□	□	□	□	□	□	No influence at all
Advice from other private persons online (e.g. from discussion forums of blogs)	Big influence	□	□	□	□	□	□	No influence at all
Consumer information (e.g.	Big influence	□	□	□	□	□	□	No influence at all

newspaper articles, *Råd & Rön*, the TV program *Plus*

| Independent expert reviews online | Big influence | □ | □ | □ | □ | □ | □ | No influence at all |

What was the main reason why the above information source had the biggest influence on you in connection to your camera purchase?

_____

_____

Did you know that there are discussion forums on the Internet, where people can exchange experiences with others about computers/cameras they have bought?
□ Yes   □ No

How likely would you say it is that you will search for information on an online discussion forum, next time you set out to buy a technical gadget?

| Very likely | □ | □ | □ | □ | □ | □ | Not at all likely |

How do you agree with the following statements?

| Internet is a good way of finding out more about products you think about buying | Agree | □ □ □ □ | Don't agree at all | □ | Don't know |
| Internet is a good way of finding out more about products you already have bought | Agree | □ □ □ □ | Don't agree at all | □ | Don't know |

What advantages do you see with searching for information online about products you think about buying?

_____

_____

What disadvantages do you see with searching for information online about products you think about buying?

_____

_____

Thank you for participating!