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**The Effects of the Interactive Decision  
Aids on Consumers' Buying Decisions**

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buying decisions”**

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## Executive Summary

Since the revolutionary power of the electronic commerce, it becomes very important to understand how consumers interact with the web site tools and make purchase decisions. Nearly all the electronic shopping sites provide interactive decision aids to give the consumers the opportunity to control the product list. Of the many different tools, this thesis focuses on the filter tool and the sorting tool.

The data shows that the tools have positive influences on the purchase probability of the consumers. This positive impact can be explained by the impact of motivation, which is a mediator between the two factors. Furthermore, the purchase probability can also be influenced by the involvement of the consumers towards the tools. The higher the involvement the higher the purchase probability. However, using the sorting tool to arrange products by price can change the price sensitivity of the consumers. Consistent with previous studies (e.g. Diehl et al, 2003; Lynch et al., 2000), consumers react differently if the same products are presented in diverse arrangement. When a relative expensive product (mean = 7,67 on a 9-point Likert scale) is placed with other more expensive products, the expensiveness of the products is 6,70. The expensiveness of the same product decreases to 6,17 when the product list is sorted by ascending price. The opposite, in the random situation whereas a relative low-priced product (mean = 3,20 on a 9-point Likert scale) is placed with other less expensive products has on average an expensiveness of 4,59. Consumers considered the product more expensive in the sorted situation, namely 5,69.

Final, the research concludes with some managerial implications and projects some limitations of this study to give some ideas for the future researches.

# Chapter 1 Introduction

## 1.1 Introduction

A few years ago, almost every purchase was made in a physical retail store and it was hard to imagine that the Internet will have such a great impact on the retail sector (Arce-Urriza et al, 2009). E-commerce, i.e. commerce on the internet, has been growing at a very rapid pace. This rapid growth of e-commerce is because of the many advantages of internet shopping over shopping at the brick-and-mortar stores. One important advantage of internet shopping is the ease of obtaining information (Ward and Lee, 2002). With “a few mouse clicks”, consumers are able to compare all kind of products by several attributes, such as price, size and color (Pfeiffer et al, 2009).

Since there are differences between online shopping behavior and traditional consumer behavior, e-tailers cannot directly apply their existing knowledge of consumer behavior to the new shopping medium. Therefore, it is important for them to better understand how online consumers interact with the internet websites and how they make purchase decisions (Arce-Urriza et al, 2009).

Previous studies have focused on identifying factors according to the accessibility of online information that effect the online consumer behavior and decision making. For instance, Häubl and Trifts (2000) have found out that the availability of *interactive decision aids tools* at web shops have the possibility to change the way in which consumers search for product information and make purchase decisions. When using these tools, it provides customers convenience to customize the online shopping environment to their individual preferences and allow them to control their own information search. They mention two types of decision aids, the Recommendation Agent and Comparison Matrix. Recommendation agent is a

decision guide that “recommends” products based on the consumer personal preferences. Comparison matrix helps consumers to compare and organize products by any attributes. Some examples of several interactive decision aids are sort, filter and pairwise comparison (Pfeiffer *et al.* 1999). These tools are available both *within* an online retail store and *across* online retailers (e.g., [www.shopper.com](http://www.shopper.com)). Brynjolfsson and Smith (2001) have done research on the second one, across online retailers. They focus on the Internet shopbots which influence consumer decision making process. Internet shopbots are huge websites for finding information on variety of product characteristics and allow consumers compare prices, services and other attributes from lots of retailers at the same time. They have found out that shopbots consumers are sensitive to the presence of brand and that frequent purchasers are less sensitive for price. Some other researchers (e.g. Shankar, 1999; Reibstein, 2002; Baye et al, 2003) have focused on the price perception of consumers, because many retailers fear that the huge amount of information online will stimulate the price sensitivity of consumers. Some have found that price sensitivity is higher online because of the overload of advertising and the high signaling of price discount (Chu et al, 2008). However, there are some conflicting findings, because other researchers have found the opposite. They have found that price sensitivity online is lower than offline, because the main advantages such as convenience, time saving and lowering search cost for quality information are more important than price (Arce-Urriza et al, 2009).

For the retailers, it is essential that consumers reduce their price importance or sensitivity to judge and choose the products. To achieve this, retailers need to increase the quality importance of consumers by making quality information of products easier to search (Lynch et al, 2000). One way to make this possible is to provide a sorting tool based on quality.

Some marketing (e.g. Diehl et al. 2003; Lynch et al. 2000), and psychology (e.g. Bettman et al. 1986) literature indicate that the same information can result in different outcomes if it is presented in diverse arrangement. Thus, the design of the product list is important for the consumer purchase decision making process (Kardes et al, 1990).

## **1.2 Problem statement**

Nowadays, people are confronted with time pressure. They seem to have less and less time to do more and more different activities. Therefore, e-tailers want to make the online shopping experience as convenient and comfortable as possible. Adding *interactive decision aids tools* at web shops, consumers easily access more information than traditional stores, which in turn support the user' buying process (Häubl and Trifts, 2000). However, too much information availability may have negative consequences for both the e-tailers and the consumers (Scheibehenne, 2010). For instance, overload of product information may confuse consumers and reduce their satisfaction level. The negative feelings are caused by the huge variety of alternatives that is provided on the moment of purchase. This effects them to make poorer and less effective decisions (Lucian et al, 2007). Lower satisfaction will lead to lower sales and this has negative results for the retailers. Also making use of these tools may increase the price sensitivity of consumers. This is because consumers can compare products prices easier. In short, interactive decision aids is on the one hand convenient, but on the other hand it has negative consequences for the decision process.

Because of these problems, there is a need to do some more research in this area. Many previous studies have focused on the huge price comparison websites, which also is

mentioned as Internet shopbots. These websites compare products across the many online retailers.

This study will focus on the sorting and filter mechanisms, two types of interactive decision aids, *within* a single online retail store. **Sorting** mechanism gives the customer the opportunity to rearrange products by several categories on basis of a particular criterion (e.g., low to high price, newest to old, etc.). **Filter** mechanism helps customers to remove products that do not meet their preferences (e.g. minimum and maximum price range, product type). This way will help users to view only relevant products and products that are important to them. (Pfeiffer et al, 2009). These two types of mechanisms are very often use in web shops to support consumers to make decisions easier and more precise.

However, like a well-known proverb says: "Every advantage has its disadvantage". The ability to sort product for instance by price from low to high, may stimulate the price sensitivity and influence the choice behavior of the consumers. Because of the ease of comparison, it is possible that consumers have less intention to buy expensive products (Garbarino and Slonim, 1995). It is also the case that customers have less attention for the last few pages than the first few pages. This means that the most expensive products (sort by low to high price) and the oldest products by date (sort by newest to oldest) will have a lower probability of selling. The problem that e-tailers have to face is to keep these products in inventory until they are sold.

A consequence of the mechanism filter is that once the consumer filter out some products, the products that do not meet the criterion will be hidden and will not be seen (Pfeiffer et al, 2009). The number of viewings per product will decrease, which effects negatively the probability of selling.

To measure the consequences of these tools, it is important to use a common retail sector. Since the growing of e-commerce, clothing/apparel sector is also growing rapidly. Some research shows that clothing is one of the most popular product categories that consumers likely to buy online (Coward et al, 2007). The increasing success is very interesting, because the decision process of purchases of clothing products online differ totally from the traditional stores. When buying online, it is not possible to touch, feel and trying on of certain products (Seock, 2003). The decisions are mostly based on the factors such as pictures, reviews, risk-aversion of consumers and the information of the interactive decision aids. With the sorting tool within an online store, the barrier to find the lowest price for an item in the traditional store is solved.

In short, this study examines the influences of the sorting and filter tools of an apparel website on consumers' shopping behavior and how these online mediums effect the importance of price. With this purpose in mind, the main research question is the following:

**“What is the impact of the availability of sorting and filter products mechanisms on apparel websites on consumers' buying decisions?”**

To answer this question, the following sub-questions are created.

- 1) Which attributes on apparel websites are important for consumers?
- 2) What is the relationship between price sensitivity and the mechanisms sorting and filter?
- 3) What are the differences in consumer behavior when products are sorted and unsorted or filtered and unfiltered?

### **1.3 Contributions**

This research will benefit both the theoretical and practical areas. From the theoretical perspective, it can potentially contribute to the existing literature on consumer purchase decision making process in online shopping and e-commerce literature. It shows that consumer decision making in an online environment might be influenced by the design or the order of the product list. To test this, the filter and the sorting tools are used. These two interactive decision aids are not often and fully discussed in the existing literature. Building on several choice and decision theories, I explain how these two tools influence the intention of consumers to purchase online products.

From the practical perspective, this study will provide several implications for the online retailers. With these implications they can improve the design of their web shop. Some web shop doesn't provide any interactive decisions aids. Some others only provide one of the tools and some others offer both the filter and the sorting function. Using the findings of this study, online retailers can increase the attractiveness of their website and purchase intention of consumers. Furthermore, this study focused on the clothing sector, which is one of the most popular online shopping segments. Therefore, the findings will have a great impact on a large amount of the total online shoppers.

### **1.4 Thesis organization**

This thesis comprises six chapters.

The first chapter introduces the problem of the interactive decision aids filter and sorting and illustrates the importance of this research. Further, this chapter introduces several related research questions and gives an overview of the whole thesis.

Chapter 2 presents an extensive literature review about the impact of the filter and the sorting tool. A set of hypotheses regarding the filter and sorting effects on motivation, involvement, price sensitivity and purchase probability are proposed with associated theoretical reasoning.

Chapter 3 describes the research methodology of this study. It explains the setting and procedures of collecting the data. It gives in details how the questionnaire was conducted.

Chapter 4 presents the statistical analyses of the conducted data. It reports which methods are used for data analysis and whether the hypotheses are supported by the data or not.

Chapter 5 will give a general discussion on the analysis of the data.

Finally, chapter 6 concludes the thesis with some implications. Further it will project some limitations of this study and give some ideas for the future researches.

## Chapter 2 Literature Review

### 2.1 Overview

In order to investigate the effects of the interactive decision aids, filter and sorting mechanisms, on consumer decision making, a research model is developed. Three general aspects of consumer purchase decision making in the online shopping environment: (1) motivation, (2) involvement and (3) price sensitivity will be discussed.

*Motivation* is conceptualized as the impetus to action. The consumer is motivated by an expectation to achieve a goal or a desired object (Howard and Sheth, 1969). People are tended to be more motivated as they approach their goal, which is also known as the goal-gradient effect (Kivetz et al, 2006). In this study, motivation is stated as the drive to choose a product of a list of alternatives. This is an indicator to measure the effort that the consumer desires to put in.

*Involvement* has been defined in several literatures in diverse ways. The most common descriptive words for involvement are “importance”, “interest” and “commitment” of an individual toward an object (Mitchell, 1979; Cohen, 1983; Mittal, 1989). According to Wang (2010), *personal involvement* measures, in this context, how attached the consumers are towards the filter and the sorting tool while shopping on the website. This attachment leads to an increase in tendency to use the tools. Therefore, high involvement in this study means that consumers feeling attached to the tools and will use the tools often while searching for a product to purchase. Low involvement means that the tools are not important to them. Therefore, these consumers will almost never use the tools and possibly are not even aware of their existence.

*Price sensitivity* in marketing measures in generally the price awareness of the consumer (Stigler, 1961). In this study, price sensitivity measures the importance of price to the consumer. High price sensitivity means that people change their price perception after using the tools to arrange products, which in turn would influence their consumer behavior after taking into account the advice of the interactive decision aids. In contrast, purchases of consumers with low price sensitivity are based on the likeability of products instead of price. The price perception of these consumers are stable after the change of the order of the product list.

## **2.2 Choice overload**

### **2.2.1 The pros and the cons**

Since the enormous expansion of the internet, many researchers are concerned about the adverse consequences of the huge amount of options from which to choose. This is called the “choice overload hypothesis” (Iyengar and Lepper, 2000; Scheibehenne et al., 2010; Gourville and Soman, 2005). There have been a number of negative effects found, but not without some positive effects for the retailers and consumers as well.

From the e-tailer perspective, they are allowed to offer a wide range of alternatives because they have an unlimited ‘shelf space’ (Häubl et al., 2000). Also the probability of the match between the individual’s preferences and the alternatives in the choice sets will increase, which results in a higher sales (Iyengar and Lepper, 2000). Thus, having a large variety of choices creates competitive advantages for the retailers (Koelemeijer and Oppewal, 1999; Oppewal and Koelemeijer, 2005). Several researches (Boatwright et al., 2001; Borle et al.,

2005; Sloot et al., 2006) show that the sales decrease or didn't change by reducing the number of different products.

From the consumer perspective, it is pleasant to choose from a large number of products and options (Hutchinson, 2005; Chernev, 2003). At the same time, however, it is complicated for consumers to evaluate all available choices when making online purchase decision due to their unlimited cognitive capacity (Pfeiffer et al., 2009). Because they aren't able to process all the alternatives, it may lead to undesirable consequences, such as decreasing motivation to choose the right item or the satisfaction of the last chosen item (Iyengar et al., 2006; Schwartz, 2004). Consumers which such frustrated feelings, may delay purchasing or worse, choose not to buy at all (Huffman and Kahn, 1998; Greenleaf et al., 1995). Recently, several experiments have been done by Iyengar and Lepper (2000) to study the consumer behavior when facing choice overload. One of those experiments had made use of a small assortment of candy consisting of six pieces of chocolates, and a large assortment consisting of 30 pieces of chocolates, to test the satisfaction level and the motivation to choose between the two. Participants who chose the favorite one from the large assortment felt more responsible for their choices and therefore found it more complicated and frustrating. On average they score 5.5 (on a 7-point Likert scale) for the satisfaction of the last chosen chocolate, while the small assortment condition scores 6.3 (on a 7-point Likert scale). These results indicate that a large number of attractive options don't increase the motivation and the satisfaction level.

### **2.2.2 Unordered environment**

In an online unordered environment, the alternatives are listed randomly without any considering of consumer' preferences (Diehl et al., 2003). According to Bettman et al. (1998)

about the *constructive preference approach*, consumers will set their preferences at the point when product information is available. The organization of this information is essential for consumers to assess the importance of the attributes (e.g. quality, price). Therefore, a random list compared with an organized list, will make the task much complicated and thus make the consumers more difficult to find the suitable product, which effects the final purchase decision negatively (Wickens and Andre, 1990; Diehl et al., 2003). From the time-and-effort perspective, the impossibility of an extensive comparison of all the options from an unordered list of products, will result in decreasing motivation to choose and the satisfaction of the chosen product (Iyengar et al., 2006; Scheibehenne et al., 2010). Prior research of Satish et al. (2009) had found out that the extent of information search in an unordered environment have an inverted U-shaped effect. This means that the optimum point of decision quality is at the medium search level. On the other hand, the ordered environment has a linear negative effect, which means that low search will lead to better decision quality.

## **2.3 Decision making process**

### **2.3.1 - Interactive decisions aids**

Unlike the brick-and-mortar environment, online shopping isn't physical. Customers cannot touch the products before buying and online shops don't have personnel that can provide face-to-face services (Zhilin, 2003). The solution for this lack of services is the online *interactive decisions aids (IDA)* that are available on websites (Häubl and Trifts, 2000). These online tools provides customers more product information and help customers adapt their

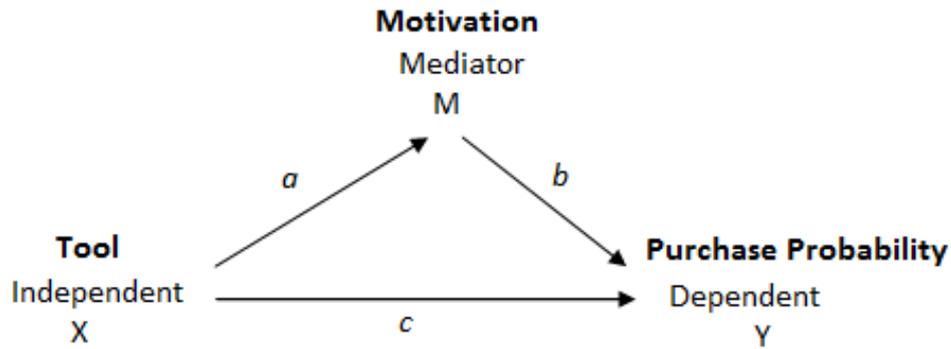
own shopping environment to their personal preferences, which make it easier to make a purchase decision.

There are three main goals for these interactive tools (West et al., 1999). The first one is to improve the decision quality. These tools reduce the decision complexity and help consumers to set an appropriate consideration set for evaluation (Huffman and Kahn 1998). The second one is to increase the satisfaction level of the consumer. The IDA is flexible in the way it operates and responds in the way that the consumer has requested, resulting in as close a match as possible between the desired product of the consumer and the individual preferences of the specific consumer. The last goal of the IDA is to develop trust (West et al., 1999). We can look at trust in two ways. Trust is very important because consumers need to give away their personal information to what amounts more or less to an unknown party (e.g. preferences). The users need to trust the tools and the website to protect them. The second trust dimension is to trust that the tools really can provide the right information and suggestions to what consumers want. Consumers need to believe that the tools can provide the best offer to them.

Before the customer makes a final purchase decision, they need to go through two stages: screening and comparison (Häubl and Trifts, 2000). In the first stage, customers make a selection of the relevant product without examining any of them in detail and find out which available products are important enough to go further with. In the second stage, customers will evaluate the product more intimately and go more into the in-depth information. To look at the in-depth information of the products, customer can easily compare the product to similar items and make a purchase decision.

### 2.3.2. Screening

A huge amount of options within a category make the choice for consumers more difficult and confusing (Scheibehenne, 2010). Because of the choice overload, consumers can use a filter tool that can be seen as an interactive aid that helps them to screen out all the alternatives that are offered in an online shop (Häubl and Trifts, 2000). Based on the own selected options by the online shopper, a range of product that fits their preferences will be shown (Pfeiffer et al., 2009). This type of decision aid is very frequent used by price comparison websites for different products. Consumers are not only allowed to filter out the price, but it is also possible to filter out all kind of attributes such as color, size and brand (Smith, 2001). After filtering the products, the choices become narrower and more clarifying. Without filtering, consumers will face unattractive options that have not met their personal interest (Scheibehenne, 2010). With the filter tool, consumers are more motivated to select the desire product, because the amount of information has reduced (Diehl, 2005; Diehl et al., 2003). This positive feeling will increase the satisfaction level of the consumer which results in a higher drive to purchase. Here an indirect positive effect is found, which is also known as the mediated effect (Baron and Kenny, 1986). According to Baron and Kenny (1986), the independent X variable affects the dependent Y variable through a mediator M. As shown in figure 1, the X variable is in this case *the filter tool* affects the Y variable *purchase probability* (path c) through the mediating variable *motivation* ( path a → path b).



**Figure 1**

Therefore I hypothesise that:

**H1a: Use of the filter tool increase the motivation level to choose.**

**H1b: Use of the filter tool increase the purchase probability.**

**H1c: The increase in motivation level has a positive impact on the purchase probability.**

Because the screening tool, such as filter, is based on consumer' preferences it can closely match their utility function (Alba et al., 1997). Thus, those who use the filter tool to assist them in their purchase process will reduce their amount of search. This tool will not only reduce their effort, but it also lead to a reduction of search time and costs (Diehl et al., 2003). It is clear that such screening tool can benefit consumers. Therefore, I expect that consumers, who are involved with the filter tool, will make better purchase decisions which will in turn stimulate the purchase. In short, the higher the involvement is, the higher the probability of purchase.

**H2: Individual involvement towards the filter tool has a positive impact on the probability of purchase.**

### 2.3.3 Comparison

In the second stage, consumers will look at the in-depth information to compare all the alternatives that are left from the first stage (Häubl and Trifts, 2000). To make it more easy to compare, consumers can order the products with the sorting tool (Diehl et al., 2003). The most popular sorting options that are available on websites are sorting products by “low to high price”, “high to low price”, “new arrivals” and “popularity” (Ha et al., 2007; [www.amazon.com](http://www.amazon.com)) . This tool will change the positions of each individual items in a list based on the chosen option of the consumer (Tam et al., 2005). In general, the highest ranked items in the sorted list are better predictions of the consumers and therefore the most desired ones. According to Tam et al. (2005) and West et al. (1999), the position of the products will influence the consumer choice decision process. For example, if products are sorted by price in an ascending order, product with low prices will be placed first in the list; consumers will focus more on these products and process this information first. This will influence the outcome of consumers’ information process. We can understand that the ordering of the product is a potential factor that influences consumer decision.

According to the two studies by Areni et al (1999) and Areni (1999) about the effects of product organization on purchase likelihoods, the specific attribute that is chosen to be sorted will increase the perceptual salience of that particular attribute. When evaluating and/or making purchase decisions, consumers will give more attention to that attribute and increase the importance of that element. One other thing they argued is that products are easier to compare when products are organized by the preferred attribute. Sorting products on one attribute (e.g., price) makes the list on that attribute homogeneous, but heterogeneous on the other unsorted attributes (e.g., rating) (Diehl et al., 2003). Therefore,

ordering products by attributes makes the items closer substitutes for each other as opposed to a list randomly generated. With this sorting tool, consumers can easily compare the alternatives, which lower the search time and the input of the consumer to find the right product (Kardes and Herr 1990). It is expected that consumers are more motivated to choose a product in a clear overview rather than in a random search, which increase the drive to purchase. In this situation, the *motivation* is again the mediating variable of the X variable *sorting tool* and the Y variable *purchase probability* (Baron and Kenny, 1986). Thus, the sorting tool influences the purchase probability in an indirect way (Zhao et al, 2010).

**H3a: Use of the sorting tool increase the motivation level to choose.**

**H3b: Use of the sorting tool increase the purchase probability.**

**H3c: The increase in motivation level has a positive impact on the purchase probability.**

Interestingly, some (apparel) web sites do not allow consumers to sort products (see Appendix B). The sorting tool causes the problem of the simple choice heuristics (Kjaer, 2006; Huffman et al., 1998). Prior researches (Payne et al., 1993; Hoyer, 1984; Tversky and Kahneman, 1974) have found out that consumers can easily engage in heuristics processing while making decisions. Consumers set tactics or simple rules of thumbs to simplify the purchase process (Hoyer, 1984; Huffman et al., 1998). Some examples of rules that consumers can have are “buy the cheapest product”, “buy the newest item” and “buy the most popular item”. This is an easy way to choose and judge an alternative, because consumers need to processed little information (Hoyer, 1984; Luce, 1998).). The sorting tool is actually helping customers to make these simple judgments and choices (Diehl, 2005). However, if consumers use the sorting tool as a device to reduce complexity and frustration,

they may feel less satisfied with their chosen product than if they considered more of the other products (Huffman et al. 1998; Iyengar and Lepper, 2000; Garbarino and Edell, 1997). Thus, to reduce this problem it is better to search more.

However, Diehl (2005) have another idea about the amount of search. She suggests, as before already is mentioned, that it is better to search less in an ordered environment compared with the unordered environment. The reason for this is that products that are farther down the ordered list don't match the consumer preferences that well anymore. Therefore, more searches will have a negative effect on the quality of the consideration set of the consumers, which in turn determine the purchase decision (Hogarth et al., 1992). However, this doesn't mean that it is better not to use the tool. To increase the decision quality of the consumers, it is necessary to be involved in the sorting tool. Thus, consumers who are interested in the tool and use this tool will obtain more information about the products (Hong et al., 2004). Decisions that are based on more information about the products are better than decisions that are based on incomplete information (Bettman et al., 1990). Therefore, consumers who are high involved towards the tool will make better purchase decisions which will in turn stimulate the purchase.

**H4: Individual involvement towards the sorting tool has a positive impact on the probability of purchase.**

## **2.4 Clothing website – attributes**

Zellweger (1997) mention that website characteristics will influence the purchase behavior of the consumers. Five general website characteristics are (1) *Product Information*, (2)

*Customer Service*, (3) *Privacy/Security*, (4) *Navigation*, and (5) *Auditory Experience* (Seock, 2003). Seock (2003) tested these five general factors in the clothing sector. From these five, the respondents perceived the privacy/security as the most important factor (3,83 on a 4-point Likert scale). The product information, which has the focus on this paper, is on the second place with a mean of 3,59 (on a 4-point Likert scale). The characteristic 'product information' is further divided in several factors. The three most important factors are "price" (3,81) , "good quality of photos" (3,73) and "showing the real color of the product" (3,64 on a 4-point Likert scale). Because of the importance of price, this study will go deeper into this attribute.

#### **2.4.1 Price**

Price is not only one of the most important attribute in the decision-making process (Chang, 2009), but it is also one of the major reasons that customers shop online due to the promise of greater savings (Chiang et al., 2003). It is possible to distinguish price in objective price and perceived price. The objective price is the exact price that is paid for a product (Winer 1986; Erickson and Johansson 1985). However, the exact price is hard to recall and to remember. Instead of using the objective price, consumers often encode and interpret the prices in ways that are meaningful to them (Sawyer et al., 1984; Zeithaml 1988). The choices and the product evaluations of the consumers are mostly influences by the perceived price and not the actual price (Chang, 2009). However, comparing prices online by sorting or filter is based on the objective prices. The ordering of the products or the products that are shown is based on the exact price, which influences the choices of the consumers (Tam et al., 2005).

When making purchase decision online, price has a relatively higher impact than the factors quality, brand image and store image (Seock, 2003). This major impact is because price is not only the first element of the decision-making process but also the last one (Chang, 2009). Price is the first element that consumers use when shopping online to filter out products that are exceeding the perceived acceptable price range. In the evaluation stage, the last element of the decision-making process, price is again used by consumers to make the final decision.

Evidences of these statements are also supported by another experiment in the fashion goods area. Martin (1970) has found that 55% of the participants use price as the prime element in their decisions. 66% of the participants want to know the price as the first information of the product. After the price is known by the participants, around 78% change their decision. In short, price has a major impact on the purchase decision process. Therefore, it is expected that price is the number reason to use the mechanisms filter and sorting.

##### **H5: Price is the most important option of the mechanisms filter and sorting.**

One way to see how a consumer responds to different prices and how the price has effect on the purchase behavior is to look at their price sensitivity (Shankar et al., 1999). The purchase decision of a price-sensitive customer is more likely to base on price than a customer who is less price sensitive (Stigler 1961). The level of the price sensitivity is for each individual different. Some personal factors that may influence the price sensitivity are “income” and “shopping frequency”.

Persons with high income have more disposable money to spend among other things on fashion items. They are less aware of the price and therefore may display lower price sensitivity (Deregatu et al., 2000). On the other hand people who shop frequently tend to be more price sensitive (Kalyanaram and Winer, 1995). This is because these people have a higher opportunity to learn from their past experiences and mistakes and are familiar with the offers available on the internet. Frequent shoppers will be more aware of prices and this has a positive impact on the price sensitivity.

**H6a: Income has a negative impact on price sensitivity.**

**H6b: Shopping frequency has a positive impact on the price sensitivity.**

The interesting part of this study is the relationship between the two mechanisms and the price sensitivity of the consumers. It is for the consumers who are price conscious important to find the best price (Shankar et al, 1999). Therefore it is essential that price information on web site is available. Using the filter and the sorting tool, price information can be easily presented. Thus, I expect that consumers who are price sensitive will make use of these interactive decision aids.

**7a: People who are price sensitive are more likely to filter products.**

**7b: People who are price sensitive are more likely to sort products.**

According to Lynch and Ariel (2000) and Alba et al. (1997), lower search cost for quality information will decrease the price sensitivity of the consumers. If online websites can suggest non-price information such as quality, consumers can better differentiate the quality of the product, and thus would increase the importance of the quality perception and decrease the price sensitivity.

On the other hand, the opposite effect is also been found by Lynch and Ariel (2000). They argued that because consumers can easily access in-depth information, it will make the price comparisons between the products easier. This reduce of search cost might increase the price sensitivity of the consumers. We can learn from the information search theory, that if the expected benefits of information search is high, the focus on price will be low, which lead to lower price sensitivity. Besides the higher the costs of searching for price information, the lower is the price sensitivity. This means also that the lower the costs of searching for information; the higher is the price sensitivity. The search costs for price information with the interactive decision aids are much lower than without these aids, because the time that is required for search is lower.

Also Diehl et al. (2003) has found the opposite effect. With three different experiments they find out that the sorting tool increase the price sensitivity of the consumers. These interactive decision aids allows consumers to find the lowest price with a few mouse clicks, which make consumers less willing to pay a high prices. This is consistent with a research by Garbarino and Slonim (1995) using price ordering for pens. They found out that people who saw the pricelist in a descending (price from high to low) way, have higher perceived prices and higher expected prices. The effect was that people were more willing to pay higher prices for the pens than people who saw the pricelist in ascending (price from low to high) order. This means that ordering products by price can change consumers' price perception and behavior.

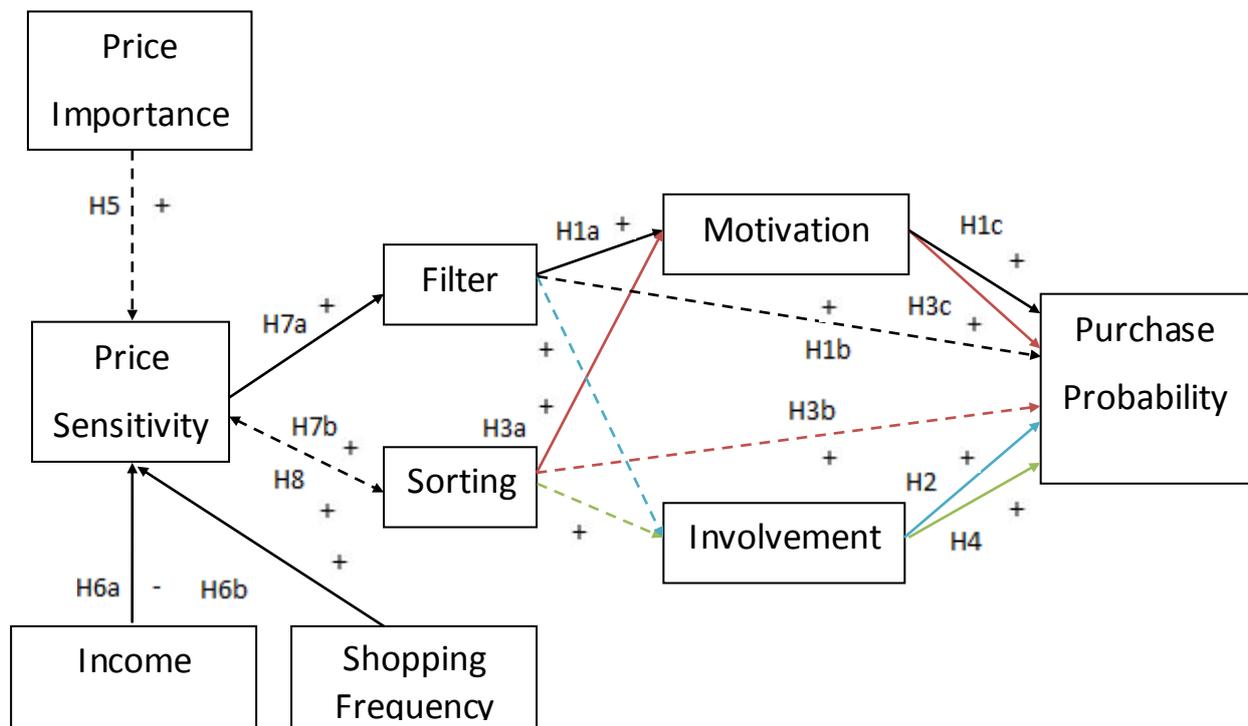
As previously mentioned, the highest rank of the sorted list is closer in substitutes (Diehl et al., 2003). The consequence is that it will lead to a less willingness to pay a premium price for the prefer option. An example, suppose a consumer is shopping for a red dress. At the first

glance, the consumer prefers a red dress for 50 euro's. After sorting all the red dresses (the substitutes) of the online shop with different selling prices by price, the consumer can easily compare all the dresses by price. Hence, the probability of choosing a cheaper dress is higher than with an unsorted list, due to the decrease of the willingness to pay high prices. Therefore, I expect that the price sensitivity is higher when consumers make use of the sorting tool.

**H8: Sorting products by price increase the consumer' price sensitivity.**

## 2.5 Research framework

After analyzing the literature about the impact of the filter tool and the sorting tool on the purchase probability, the following research framework (figure 2) is created.



**Figure 2: Research framework**

First of all, price is a very important attribute in the purchase decision making process (H5). This the top reason to take a close up on this attribute in this study. The arrow is dotted, because this study will not test this link. The level of price sensitiveness of the consumers can be caused by the income (H6a) and the shopping frequency (H6b). Consumers who are price conscious, are more likely to use the filter tool (H7a) and the sorting tool (H7b) as an aid to assist them in deciding which product to buy. The link between the sorting tool and the price sensitivity can be explained in two ways, which is presented in the framework with a dotted double arrow. The first link is the price sensitivity towards the sorting tool. The meaning of this is that consumers who are price sensitive will use the sorting tool to rearrange products by price. The second link is the sorting tool towards price sensitivity (H8). The interpretation of this is that consumer will be more price sensitive after using the tool. However, consumers who are involved in the tools increase their probability to purchase a product (H2 and H4). Also, using the tools, will increase the motivation level to choose a product (H1a and H3a), which in turn stimulate the purchase probability (H1c and H3c). Thus, the tools positively influence the probability to purchase (H1b and H3b) in an indirect way.

## Chapter 3 Methodology

### 3.1 Measurement

The primary data that are necessary to measure the hypotheses is collected with an online questionnaire. The questionnaire is prepared through Thesistools, a program on the Internet to conduct an online questionnaire. This way of collecting data is chosen for several reasons. First of all, online questionnaire is convenient for both the researcher and the respondent. Online survey provides respondents more privacy since the online survey is anonymous. Also they can fill in the survey in their own time, which is more flexible to them. Furthermore, an online survey is convenient because it can reach a large number of people at once, which results in saving time and effort. One other reason for this choice of collecting data is the easiness of showing images to participants, which is essential for my research.

The questionnaire contains printscreens of the apparel website [www.asos.com](http://www.asos.com). This website is useful because they provide both the filter and the sorting tool and also because of the large price range and product availability. Because of the difference in clothing between man and woman, two questionnaires are created with the same questions but with different images. The questionnaire consists of four parts. The first part of the questionnaire contains three general questions about the current online shopping behavior of the respondent. The questions are about the frequency of shopping online for clothes, the online shopping experience and the importance of price.

The second part includes some questions about the filter tool. This section includes a small experiment using two images to test the motivation of customers and the probability of purchase. For the women (men), the first image is a screenshots of the product category

dresses (hoodies and sweatshirts) that shows that there are 1392 different styles available in 70 pages. In this situation, the website does not provide any tool to assist them in their searching process. The second image is the same screenshot as the previous image, but in this situation the filter tool is visible in the screenshot. With this test, it is possible to test the impact of the presence of the filter tool. Furthermore, this section contains general questions about the filter tool and statements to test the degree of involvement towards the filter tool. Participants have answers the rating scale questions with a 7-point Likert scale.

The third part of the questionnaire includes the same experiment and questions as part two, but this part the focus point is on the sorting tool. This part includes one more experiment to test the price sensitivity of the customer. This experiment contains a series of three images. For each of the images the respondents have rate the expensiveness of the product using a 9-point Likert scale. For the women (men), the first picture shows a relative high priced dress (cardigan). This dress (cardigan) will have the focus in this experiment. The second image that is shown includes the focus dress (cardigan) and 15 other dresses (cardigans) in different prices. These products in this image are randomly placed and do not have an ordering. The last image of this experiment consist of the same dresses (cardigans) in image two, but this time the products are sorted by price from low to high. The last image shows that the focus dress (cardigan) is one of the cheapest dresses of the list. The purpose of this experiment is to test if the price perception of the customer changes once the ordering of products has changed. After this experiment, I repeated this experiment with another scenario. This time I use a relatively cheap dress (cardigan) to test the opposite effect. The last image of scenario two shows that the focus dress (cardigan) is one of the expensive products of the list. The purpose of the test is also to look at the change of price perception.

The final section consists of some demographic questions, such as gender, income and working status.

### **3.2 Sample Selection**

The target population for this study is for the people who have ever done online shopping from clothing websites for at least one time. Students, employed and unemployed may fill in this questionnaire due to the representativeness and the differences in income. Respondent who has never used a filter tool and sorting tool while shopping online for clothes will be eliminated of the data.

## Chapter 4 Results of Data Analysis

### 4.1 Demographics

In total 142 people filled in the questionnaire through the website of Thesistools. Nine of them have never used the filter and the sorting tool before. Thus, these respondents are not relevant for this research, since the questionnaire is about these tools and the past behavior while using these tools. Removing these respondents from the data will take out the noise and make the data more reliable. Table 1 gives an overview of the demographic profiles of the respondents and on their current shopping behavior.

Table 1: Descriptive Analysis – Demographic and current shopping behavior					
Gender	Frequency	Percentage	Income before taxes	Frequency	Percentage
Male	47	35,3%	<1500	72	54,1%
Female	86	64,7%	1500-2500	23	17,3%
<b>Age</b>			>2500	38	28,6%
<18	3	2,2%	<b>Filter frequency</b>		
18-25	81	60,9%	Every purchase	35	26,3%
26-30	40	30,1%	Often	50	37,6%
31-40	9	6,8%	Sometimes	36	27,1%
>40	0	0,0%	Rarely	12	9,0%
<b>Working status</b>			Never	0	0,0%
Student	29	21,8%	<b>Sorting frequency</b>		
Student part-time job	46	34,6%	Every purchase	34	25,6%
Employed	57	42,8%	Often	50	37,6%
Unemployed	1	0,8%	Sometimes	31	23,3%
Retired	0	0,0%	Rarely	18	13,5%
<b>Shopping frequency</b>			Never	0	0,0%
Once a week or more	9	6,8%		<b>Mean</b>	<b>St. Dev</b>
2-3 times a month	32	24,1%	<b>Shopping experience</b>		
Once a month	22	16,4%	<i>7-point Likert scale</i>	4,94	1,66
Every few months	69	51,9%	<b>Price importance</b>		
Rarely/never	1	0,8%	<i>7-point Likert scale</i>	5,71	1,33

Among the remaining 133 participants, 64,7% were females and 35,3% were males. Almost two-thirds of the respondents (60,9%) are between 18 and 25 years old, 30,1% are in the age between 26 and 30. The biggest part of these respondents (56,4%) are students, whereas 46 of the 75 students have a part-time job. The remaining part is employed (42,8%) and 0,8% is unemployed. Because of the high number of students, 54,1% has an income under 1500 euro's. 28,6% have an income higher than 2500 euro's and the remaining part (17,3%) is in between these incomes.

Looking at their shopping current shopping behavior, more than half of the participants (51,9%) shops online for clothes every few month. The second largest group with 24,1% shops 2-3 times a month, followed with 16,4% shops once a month. Furthermore, 37,6% of the participants use the filter tool and the sorting tool often while shopping online and around a quarter use the tools every purchase. Final, the average of online shopping experience is 4,94 on a 7-point Likert scale and price importance has an average of 5,71 on a 7-point Likert scale.

## **4.2 Reliability**

In order to measure the internal consistency of the variables, the Cronbach's Alpha was computed. The Cronbach's Alpha of motivation is 0,916 (without tool), 0,933 (with filter tool) and 0,941 (with sorting tool). Furthermore, the Cronbach's Alpha of involvement is 0,895 (filter tool) and 0,924 (sorting tool). These results show that the internal consistency among the items is high and very good. Thus, it is possible to assume that the scales are reliable.

### 4.3 Hypotheses testing

#### Motivation – Filter tool

Hypothesis 1 tests the effect of the filter tool on the purchase probability through the mediator motivation.

To test H1a, the effect of the filter tool on motivation, regression analyses are used.

Independent variable	Dependent variable	R	R Square	$\beta$	Std. Error	P-value
Filter tool	Motivation	0,836	0,699	<b>3,021</b>	<b>0,122</b>	0,000
Filter tool	Purchase probability	0,777	0,603	<b>2,902</b>	<b>0,145</b>	0,000

The results show that there are positive correlations between the filter tool and motivation (0,836) and between the filter tool and purchase probability (0,777). 0,699 of the variance in the dependent variable motivation can be explain by the independent variable filter tool and 0,603 of the variance in the dependent variable purchase probability can be explain by the independent variable. More important of these results is the regression coefficient. The table above shows a positive value (3,021), which indicates a positive relation between motivation and filter tool. This value is also significant ( $p=0,000$ ). Furthermore, the filter tool also effects the purchase probability in a positive way (2,902;  $p=0,0000$ ). In short, the presence of the filter tool in a web shop, increase the motivation level and the purchase probability. Thus, **H1a and H1b are supported.**

To continue with the analysis of Hypothesis 1 linear regression is again used.

Independent Variable	$\beta$	Std. Error	P-Value
Filter tool	0,272	0,179	0,131
Motivation	<b>0,871</b>	<b>0,050</b>	0,000

Dependent Variable: Purchase probability

The total effect of the filter tool (X) on the purchase probability (Y) is 2,902. However, the effect of the filter tool almost disappears (0,272) if the mediator Motivation is added as predictor of Y. This value is insignificant; therefore it seems that the mediator has fully impact on the purchase probability. To confirm this, Sobel test<sup>1</sup> is conducted. The results of this test is  $S = 14,25$  ;  $p = 0,000$ , which implies that there is in this case complete mediation.

Therefore, **H1c is fully supported by the data.**

#### Motivation – Sorting tool

Similar to the previous hypotheses, the same tests were conducted to test the effects of the sorting tool on the motivation level and the purchase probability.

Linear regression shows the following results.

Independent variable	Dependent variable	R	R Square	$\beta$	Std. Error	P-value
Sorting tool	Motivation	0,809	0,654	<b>2,951</b>	<b>0,132</b>	0,000
Sorting tool	Purchase probability	0,768	0,590	<b>2,895</b>	<b>0,149</b>	0,000

<sup>1</sup> Sobel test calculator: <http://www.danielsoper.com/statcalc/calc31.aspx>

The table above shows a positive correlation between the variables sorting tool and motivation (0,809) and between the sorting tool and purchase probability (0,768). The sorting tool explains the variance in motivation 0,654 and 0,590 in purchase probability. Furthermore the results shows positives coefficient regarding the relation between the independent and dependent variables motivation and purchase probability (respectively  $\beta=2,951$ ;  $\beta=2,895$ ). These values also show the difference between the situation without the tools and the situation with the tools. Both values are significant, which means that it can be concluded that **H3a and H3b** are confirmed by the data.

To test if the motivation is the mediator of the sorting tool and purchase probability, linear regression and the Sobel test are necessary.

Independent Variable	$\beta$	Std. Error	P-Value
Sorting tool	0,176	0,145	0,226
Motivation	<b>0,921</b>	<b>0,040</b>	0,000

Dependent Variable: Purchase probability

The first thing that is remarkable is the insignificance of the sorting tool. This is sign that the motivation is a complete mediator, because motivation has a high impact on the purchase probability. The effect of the sorting tool on the Y-variable has extremely decreased from 2,951 to 0,176.

To prove that the motivation is the mediator, the Sobel test is needed. The results of this test shows a positive value and a significant result ( $S=16,04$ ;  $P=0,000$ ). Thus, it can be concluded that complete mediation is presence in this case. Therefore, **H3c is confirmed**.

## Involvement

Taking all the variables that testing involvement into account, the Pearson correlation between involvement towards the filter tool and purchase probability is 0,391 ( $p=0,000$ ) and involvement towards the sorting tool and purchase probability is 0,401 ( $p=0,000$ ). These positive values mean that involvement towards the tools increase the probability to purchase. Using linear regression, with the tool as independent variables and purchase probability as the dependent variable, the same findings can be found. The beta coefficients of the involvement towards the filter and sorting tools are respectively 0,494 ( $p=0,000$ ) and 0,448 ( $p=0,000$ ).

In addition, it is interesting to look how involvement change, if motivation will be added in the model.

<b>Independent Variable</b>	<b><math>\beta</math></b>	<b>Std. Error</b>	<b>P-Value</b>
Involvement filter tool	0,139	0,088	0,116
Motivation	0,779	0,085	0,000

Dependent Variable: purchase probability

<b>Independent Variable</b>	<b><math>\beta</math></b>	<b>Std. Error</b>	<b>P-Value</b>
Involvement sorting tool	0,001	0,055	0,986
Motivation	0,938	0,053	0,000

Dependent Variable: purchase probability

In both situations, it is clear that the effect of involvement on the purchase probability has decreased. The beta coefficient of involvement towards the filter tool has decreased from

0,494 to 0,139 and the sorting tool involvement has decreased from 0,448 to 0,001. Both new beta coefficients are insignificant.

These analyses show that involvement has a positive impact on the purchase probability, which **confirmed H2 and H4**. However, the impact of involvement will be very small, if motivation also plays a role in this situation.

### Price

H5 predicted that price is the most important option of the filter and sorting tool. The table below show the results based on the ranking of the respondents.

	<b>Filter tool</b>	<b>Mean*</b>	<b>Std.Dev</b>	<b>Sorting tool</b>	<b>Mean*</b>	<b>Std.Dev</b>
<b>1</b>	<b>Price</b>	1,84	1,11	<b>Lowest price</b>	1,79	1,17
<b>2</b>	<b>Size</b>	2,74	1,30	<b>Most popular</b>	2,47	1,06
<b>3</b>	<b>Color</b>	3,09	1,16	<b>Newest</b>	2,66	0,98
<b>4</b>	<b>Brand</b>	3,66	1,21	<b>Highest price</b>	4,02	1,15
<b>5</b>	<b>Product type</b>	3,68	1,42	<b>Name</b>	4,03	1,03

\* 1= most important 5= least important

According to the table above, the option price is the highest in ranking of both tools. On average, price is the most important attribute of the filter tool, followed by size, color, brand and product type. Furthermore, sorting products by price in an ascending way is the most important option of the sorting tool among the respondents. With these results, it can be

concluded that the tools are mostly used to arrange products based on price. Thus, price is the most important option of the tools, which **confirmed H5**.

In order to test the income on price sensitivity, independent samples t-tests were conducted. With these tests, it is possible to compare the income groups with each other. The respondents could choose from three income groups: Low (<1500 euro), Medium (between 1500 and 2500 euro) and High (>2500 euro).

Income (Before taxes)	N	Price importance Mean (7-point Likert scale)	Std. Dev	Sig. (2-tailed)
Low	72	5,93	1,29	0,730
Medium	23	5,83	1,15	
Low	72	5,93	1,29	0,011
High	38	5,23	1,42	
Medium	23	5,83	1,15	0,099
High	38	5,23	1,42	

Looking at the price importance, the group with low income has the highest price importance (5,93) and the group with high income has on average the lowest price importance (5,23). However, these averages do not differ much from each other. According to the table above, only the comparison low with high income is significant ( $p < 0,05$ ).

Testing income and price sensitivity using Spearman's rank correlation results a negative relationship (-0,240;  $p = 0,05$ ). This means that the higher the income the lower the price sensitivity. Therefore **H6a is supported** by the data.

H6b argued that price sensitivity could also be influenced by the shopping frequency of the customer. The result of the Pearson correlation is a positive value (0,144), which means that the higher the shopping frequency the higher the price sensitivity. However, the value is insignificant ( $p=0,097$ ). Thus, **H6b can be rejected**.

In order to test the impact of price sensitivity on the interactive decision aids, Pearson correlation is used. The correlation of the filter is 0,350 ( $p=0,000$ ) and of the sorting tool 0,228 ( $p=0,008$ ). These positive values mean that there is a positive relation between the price importance and the frequency of using the tools to organize the products. Thus, people who are price conscious will arrange products more often. Therefore, **H7a and H7b** are supported by the data.

Last, the results of the two experiment testing the price sensitivity of participants whether products are sorted by price or not are shown below.

Scenario	Image	Mean (9-point Likert scale)	Std. Dev.	Difference between random and sorted	p-value
1 (High price)	Single	7,67	1,19	-	-
	Random	6,70	1,41	0,53	0,000
	Sorted	6,17	1,61		
2 (Low price)	Single	3,20	1,63	-	-
	Random	4,59	1,67	1,10	0,000
	Sorted	5,69	1,69		

The results of the paired samples t-test show that the mean of scenario 1 is descending. The product of this scenario is a relative high-priced product and has a mean of 7,67 (on a 9-point Likert scale). If people can compare the product with other more expensive products the expensiveness of the product decreased to 6,70. The last picture whereas the same products are sorted by ascending price has on average an expensiveness of 6,17. The difference of expensiveness between the unsorted and sorted environment is 0,53 ( $p=0,000$ ). These results show that if an expensive product is sorted by price with other more expensive products, it becomes cheaper in the mind of the consumers. Thus, people change their price perception if the products are placed in a different order.

Furthermore, also scenario 2 shows that the price perception of the participants has changed. This scenario was tested with a relative low-priced product. The expensiveness of the product had a mean of 3,20. In the random situation whereas the product is place with other less expensive products has on average an expensiveness of 4,59. The product becomes more expensive in the sorted situation, namely 5,69. The difference between these situation is 1,10 ( $p=0,000$ ). The means tell that a relative cheap product will be considered expensive when the product is sorted with other less expensive products.

These two scenarios have proven that the order of the products has indeed effect on the price perception of the consumers. People have a different opinion about the price of the same product when the products are sorted by price. Sorting products by price makes the consumers more aware about the product price. Therefore, it can be concluded that people are more price sensitive if products are sorted by price. Thus, **H8** can be **confirmed**.

## Chapter 5 Discussion

The findings of this study are mostly consistent with the previous studies. The major purpose of this study was to find out the effects of the two interactive decisions aids, filter and sorting, on the purchase probability. This study has proven that the presence of the tools while shopping online increases in the motivation level to determine which product to buy, which in turn stimulates the probability of purchasing a product. This can be explained by that the tools reduce search time and effort, since the tools can help the consumers to remove the irrelevant products and rearrange products by their personal preference (Diehl, 2005). Thus, the motivation level is the moderator between the tools and the probability of purchase.

Furthermore, the results regarding the involvement towards the tools show that there is minimum difference between the filter tool and the sorting tool. The positive values of the results tell that people who are interested in the tools and feel dependent on the tools will have a higher chance to buy a product. These results are expected, since people who are involved in the tools are more aware of the functions of the tools. By using the tools, people will obtain more information about the products, which make the choices between the products simplified.

Also the results have shown that after adding motivation in the analyses, the impact of involvement almost fully disappeared. It can be assumed that the tools first of all have impact on the involvement of the consumers. After they are involved towards the tools and use the tools, they have more motivation to search for a product to buy.

In addition, the results showed that price is in general very important to everyone (5,71 on a 7-point Likert scale). This result reflects the outcomes about the price sensitivity. Looking at the mean, the differences of the price sensitivity between the three income levels low, medium and high are very small (respectively 5,93; 5,83 and 5,23). However, these results are significant and prove that income does have a negative impact on the price sensitivity. It is possible to understand that people who have more money to spend are less price conscious.

One other demographic factor of the consumer is about the assumption that more frequent shoppers are more price aware, however, this assumption is not confirmed by this study. This insignificance could be caused by the result of the aforementioned price importance. The fact that almost everyone is relatively price conscious, which means it does not matter how often someone shops online. Frequent shoppers can be price aware because they have more knowledge about the prices and products of the web shop. On the other hand, shoppers who shop relatively less could also be price aware. Since they have less shopping experience they are more careful with their purchases. Therefore that they are price alert.

Price sensitivity is an important motive to use the interactive decision aids filter and/or sorting. This study has confirmed that people who are price conscious will use the tools to help them arrange the products. Comparing the two tools with each other, the price sensitivity has a higher impact on the filter tool ( $\beta=0,350$ ) than the sorting tool ( $\beta=0,228$ ). This indicates that the people are more likely to use the filter tool than the sorting tool to arrange products. The results do not tell which option of the tools they will choose. However, it is understandable that price conscious consumers will use the interactive

decision aids to arrange products by price. By doing this, people will get easily information about the cheapest and advantageous products.

We can now state that price sensitivity does have a direct cause and effect with the usage of the sorting tool. The results show expected outcomes and are consistent with previous studies (Diehl et al, 2003; Garbarino and Slonim, 1995). Sorting a high-priced product with other expensive product becomes a relatively cheap product in the mind of the consumers. The opposite, a low-priced product sorted with other less expensive products will be considered expensive. The results show that the tool changes the price perception of the consumers, which in turn may leads to a change in their buying behavior. In the situation of the relative expensive product, consumers may have a higher willingness to buy if this product is one of the cheapest products of the list. On the other hand, when a relative inexpensive product is one the most expensive product of the product list, the willingness to pay for the product will decrease. It can be concluded that the order of the products have a great impact on the purchase behavior. The sorting tool can easily order the products by price, which stimulates the price awareness of the consumers. Thus, the sorting tool will increase the price sensitivity of the consumers.

## Chapter 6 Conclusion, Implications and Limitations

### 6.1 Conclusion

This thesis can be concluded that the filter and the sorting tool can have a negative side and a positive side that influences the consumer buying decisions.

First, the results of the study have shown that price is a very important factor for consumers while shopping online. This leads to the conclusion that consumers are likely to filter and/or sorting products. However, sorting products by price will lead to higher price sensitivity. The change in price perception may change the purchase decision of the consumers. This makes it difficult to predict the behavior of the consumers.

The positive side of the tools is that using the tools will increase the probability of purchasing a product. The tools arrange the products by consumer' preferences which make it easier to find something suitable. Otherwise, consumers will face many unwanted and unattractive products which increases the search time and can cause consumer frustration. Thus, because of the benefits that the tools can provide the consumers, consumers will be more motivated to search for the particular product they desire. This study has shown that the more the consumer feel attached to the tools, the higher the purchase probability. In short, the use of the tools simplifies the consumer buying decision process which leads to an increase in the purchase probability.

## **6.2 Managerial Implications**

The results of this study can supplement the present and future managers to approach their business ideas.

It is important to know that when consumers shop online their decision making process can be unpredictable. Their importance weight of e.g. price can be influenced by the sorting tool. This study has shown that consumers react differently if the same product is shown in a different order. This confirms that consumers are not consistent with their opinion and will adapt their consideration set and their price perception. Thus, the sorting tool will make the consumers more price sensitive. Websites can increase the importance of quality to diminish the price effects of the sorting tool. Promoting more high quality products and showing a descending list of quality products can support the quality awareness of consumers since the order of products can influence the consideration set. One other option is to not let consumers sort products by price. Several apparel online stores (e.g. Zara, H&M) provide only a filter tool to arrange product by price, this strategy could reduce the price sensitivity. However, it is also possible that consumers will be unsatisfied by the absence of the sorting tool. Sellers and businesses must determine which goal is more important and beneficial, a reduction of the price sensitivity or the satisfaction of the customers?

## **6.3 Limitations & Future Research**

This study has certain several limitations, which makes it possible to explore some new research venues.

First, this study has only selected the clothing sector for the experiment. Results about the filter tool and the sorting may be only relevant for this type of products. The consumers' price perception could be different for other products. To make the results more generalized towards other fields, other product types (e.g. electronic, travel, cars etc.) can be added in the experiment.

Second, it is necessary to note that the experiment has his own drawbacks. Studying consumers' online shopping behavior it is possible that there is internal validity. Since the respondents of the survey are giving their opinion based on their past behavior, it could be differ from their real shopping behavior. For a future research it would be better to set an experiment that is close to the real life shopping situation. Where it is also possible to click on the filter and/or sorting tool.

Third, this study has focus on the filter tool and the sorting tool separately. Currently many web shops provide both the filter and the sorting tool. This means that the consumer can use both tools at the same time. The combination of the tools could have different effects on the purchase probability. However, the experiments of this study have only tested the effect of the tools one by one.

In conclusion, this study has only measured the effects of the sorting tool on the price sensitivity and not of the filter tool. It was not feasible to do an experiment with this tool through a questionnaire being that a questionnaire would lack the realism of actual shopping's unpredictable and impulsive behaviors. The best method to measure peoples change in their price perception was to observe the participants while they were shopping

online. Observation is a highly useful and indicative way to look at real life behaviors of the consumers.

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## Web sites

[www.amazon.com](http://www.amazon.com)

[www.asos.com](http://www.asos.com)

[www.mango.com](http://www.mango.com)

[www.shop.hm.com](http://www.shop.hm.com)

[www.shopper.com](http://www.shopper.com)

[www.zara.com](http://www.zara.com)

## Appendix A: Questionnaire

1. **How often do you shop online to purchase clothes?\***

- Once a week or more
- 2-3 times a month
- Once a month
- Every few months
- Rarely/never

2. **How would you rate your experience of shopping online on a scale of 1 to 7, where 1 being the worst and 7 being the best?**

Online experience

The worst



The best

3. **How important is price to you when it comes to buying clothes online?**

Unimportant



Important

### Part II: Questions about the filter tool.

In the picture below an example of the filter tool is given. This tool helps you to remove products that do not meet your preferences. This will help you to view only relevant products and products that are important to you.

### Filter Tool

#### REFINE BY

##### SIZE

- UK 4
- UK 6
- UK 8
- UK 10
- UK 10-12
- UK 12
- UK 12-14
- UK 14
- UK 16

##### COLOUR

- |                                 |                                |
|---------------------------------|--------------------------------|
| <input type="checkbox"/> Beige  | <input type="checkbox"/> Black |
| <input type="checkbox"/> Blue   | <input type="checkbox"/> Brown |
| <input type="checkbox"/> Copper | <input type="checkbox"/> Cream |
| <input type="checkbox"/> Gold   | <input type="checkbox"/> Green |
| <input type="checkbox"/> Grey   | <input type="checkbox"/> Multi |
| <input type="checkbox"/> Orange | <input type="checkbox"/> Pink  |
| <input type="checkbox"/> Purple | <input type="checkbox"/> Red   |
| <input type="checkbox"/> Silver | <input type="checkbox"/> Stone |
| <input type="checkbox"/> Tan    | <input type="checkbox"/> White |
| <input type="checkbox"/> Yellow |                                |

##### PRICE RANGE



**Now two scenario's will be shown to you.**

After each scenario the same questions will be asked. Please look at the images carefully!

**The situation below shows the category dresses.**  
 In total 1392 dresses are available on 70 pages. In this situation not any tool is provided.

1392 styles found



ASOS Bandeau Dress in Colour Block  
 €52.48



ASOS Sixties Skater Dress With Belt  
 €52.48

MORE COLOURS



ASOS One Shoulder Dress in Digital Floral Print  
 €72.16



ASOS Pleated Dress with One-Shoulder  
 €65.28



ASOS Bodycon Dress with Cut-Out Bar  
 €39.36



ASOS Lace Body Con Dress  
 €59.04

MORE COLOURS



ASOS Bodycon Dress with Off the Shoulder Sleeve  
 €32.80



ASOS Cut Out Shift Dress  
 €45.92

MORE COLOURS



TFNC One Shoulder Dress  
 €59.04

MORE COLOURS



TFNC Dress Abstract Caribbean Print One Shoulder Tie  
 €59.04

MORE COLOURS



Motel Wallflower Print 2 In 1 Jenna Dress  
 €49.86



Motel Emilia Nautical Stripe Gold Button Dress  
 €68.22



Ted Baker Dress With Lace Embroidered Basque and Full Skirt  
 €523.49



Beyond The Valley Silk Dress With Banana Leaf And Animals Print  
 €288.64



Beyond The Valley Beams Dress With Bead Embellishment  
 €328.00



Ted Baker Birdcage Print Maxi Dress  
 €261.09

1392 styles found

1 2 3 4 5 ... 70 Next »

4.

**In the situation above, please indicate how motivated you are to search the right product to purchase?**

Not motivated



Motivated

5.

Please use the series of descriptive words listed below to indicate your feelings while buying clothes in a shopping environment like this .

Frustrated	<input type="radio"/>	Fulfilled
Unsatisfied	<input type="radio"/>	Satisfied
Unpleasant	<input type="radio"/>	Pleasant
Hard	<input type="radio"/>	Easy

6.

How likely are you to purchase a product from this kind of web shop?

Unlikely         Likely

In the situation below you will see the category dresses.  
In total there are 1392 dresses available. The filter tool is now available.

REFINE BY

1392 styles found

▼ SIZE

- UK 4
- UK 6
- UK 8
- UK 10
- UK 10-12
- UK 12
- UK 12-14
- UK 14
- UK 16

▼ COLOUR

<input type="checkbox"/> Beige	<input type="checkbox"/> Black
<input type="checkbox"/> Blue	<input type="checkbox"/> Brown
<input type="checkbox"/> Copper	<input type="checkbox"/> Cream
<input type="checkbox"/> Gold	<input type="checkbox"/> Green
<input type="checkbox"/> Grey	<input type="checkbox"/> Multi
<input type="checkbox"/> Orange	<input type="checkbox"/> Pink
<input type="checkbox"/> Purple	<input type="checkbox"/> Red
<input type="checkbox"/> Silver	<input type="checkbox"/> Stone
<input type="checkbox"/> Tan	<input type="checkbox"/> White
<input type="checkbox"/> Yellow	

▼ PRICE RANGE

€10  €525

▼ BRAND

- 1971 Reiss
- A Wear
- Allsaints
- Aqua
- ASOS
- ASOS White
- Beyond the Valley
- Bolongaro Trevor
- Boutique by Jaeger

▼ PRODUCT TYPE

- Dresses
- Tunics



ASOS Bandeau Dress in Colour Block  
€52.48



ASOS Sixties Skater Dress With Belt  
€52.48  
[MORE COLOURS](#)



ASOS One Shoulder Dress in Digital Floral Print  
€72.16



ASOS Pleated Dress with One-Shoulder  
€85.28



ASOS Bodycon Dress with Cut-Out Bar  
€39.36



ASOS Lace Body Con Dress  
€59.04  
[MORE COLOURS](#)



ASOS Bodycon Dress with Off the Shoulder Sleeve  
€32.80



ASOS Cut Out Shir Dress  
€45.92  
[MORE COLOURS](#)



TFNC One Shoulder Dress  
€59.04  
[MORE COLOURS](#)



TFNC Dress Abstract Caribbean Print One Shoulder Tie  
€59.04



Motel Wallflower Print 2 In 1 Jenna Dress  
€49.86



Motel Emilia Nautical Stripe Gold Button Dress  
€68.22



Ted Baker Dress With Lace Embroidered Basque and Full Skirt  
€523.49



Beyond The Valley Silk Dress With Banana Leaf And Animals Print  
€288.64



Beyond The Valley Beams Dress With Bead Embellishment  
€328.00



Ted Baker Birdcage Print Maxi Dress  
€261.09

1392 styles found

7.

**In the situation above, please indicate how motivated you are to search the right product to purchase?**

Not motivated               Motivated

8.

**Please use the series of descriptive words listed below to indicate your feelings while buying clothes in a shopping environment like this.**

Frustrated	<input type="radio"/>	Fulfilled
Unsatisfied	<input type="radio"/>	Satisfied
Unpleasant	<input type="radio"/>	Pleasant
Hard	<input type="radio"/>	Easy

9.

**How likely are you to purchase a product from this kind of web shop?**

Unlikely               Likely

10.

**How often do you use the filter tool when you shop online?**

- Every purchase
- Often
- Sometimes
- Rarely
- Never

11.

**From the following filter options, please rank them in order from 1- 5 (1 most important, 5 least important).**

Size	<input type="text"/>
Color	<input type="text"/>
Price	<input type="text"/>
Brand	<input type="text"/>
Product type in a selected category (e.g. Jeans: Skinny; Slim; Straight etc.)	<input type="text"/>

12.

**What does the filter tool mean to you while purchasing from a clothing website. Please use the series of descriptive words listed below to indicate your level**

Unimportant	<input type="radio"/>	Important
Boring	<input type="radio"/>	Interesting
Irrelevant	<input type="radio"/>	Relevant
Means nothing	<input type="radio"/>	Means a lot
Unappealing	<input type="radio"/>	Appealing
Worthless	<input type="radio"/>	Valuable
Uninvolving	<input type="radio"/>	Involving

13.

Please indicate the degree in which you would agree with the following statements by choosing a number from 1-7, where 1 indicates "strongly disagree" and 7 indicates "strongly agree".

	Strongly disagree						Strongly agree
I use the filter tool as an aid to help with my decisions about what product to buy.	<input type="radio"/>						
Without the filter tool, it is hard to find the product that fits me.	<input type="radio"/>						
Without the filter tool, I think there are too many products to choose from.	<input type="radio"/>						
Filtering out some products, is the first thing I do when I shop online	<input type="radio"/>						
With the filter tool it is easier for me to decide which product to buy.	<input type="radio"/>						

**Part III: Questions about the sorting tool.**

An example of a sorting tool is shown below.

This tool gives you the opportunity to rearrange products on basis of a particular criterion (e.g., low to high price).

## Sorting Tool

SORT BY

- Select
- What's new
- Price high to low
- Price low to high

**Following two scenario's will be shown to you.**

After each scenario the same questions will be asked. Please look at the images carefully!

**The situation below shows the category dresses.**

In total 1392 dresses are available on 70 pages. In this situation not any tool is provided.

1392 styles found



Bolongaro Trevor Amadeus Maxi Dress with Lace Trim  
€203.36



ASOS Sakura Pleated Maxi Dress  
€85.28



ASOS Sakura Midi Dress with Asymmetric Hem  
€65.60



ASOS Maxi Dress in Chiffon Floral print  
€72.16



ASOS Bandeau Dress with Structured Fold  
€85.28



ASOS One Shoulder Dress in Rainbow Print  
€52.48



ASOS Mesh Pencil Dress with Contrast Top  
€52.48



ASOS Slinky Bodycon Dress with Ruched Sides  
€45.92



ASOS Swing Dress in Watercolour Print  
€52.48



ASOS Cotton Summer Dress with Cross Strap Detail  
€39.36



ASOS One Shoulder Dress with Corsage Flower  
€52.48



ASOS Stripe Dress with Pleated Skirt  
€59.04



Vila Ditsy Floral Bandeau Dress  
€28.86



ASOS Dress with Peter Pan Collar and Open Back  
€52.48



ASOS Pencil Dress with Double Strap  
€65.60  
MORE COLOURS



ASOS Linen Pencil Dress with Pleat Neckline  
€59.04

1392 styles found

1 2 3 4 5 ... 70 Next >

14.

In the situation above, please indicate how motivated you are to search the right product to purchase?

Not motivated



Motivated

15.

Please use the series of descriptive words listed below to indicate your feelings while buying clothes in a shopping environment like this.

Frustrated



Fulfilled

Unsatisfied



Satisfied

Unpleasant



Pleasant

Hard



Easy

16.

How likely are you to purchase a product from this kind of web shop?

Unlikely



Likely

In the situation below you will see the category dresses.  
In total there are 1392 dresses available. The sorting tool is now available.

1392 styles found



Bologaro Trevor Amadeus Maxi Dress with Lace Trim  
€203.36



ASOS Sakura Pleated Maxi Dress  
€85.28



ASOS Sakura Midi Dress with Asymmetric Hem  
€65.60



ASOS Maxi Dress in Chiffon Floral print  
€72.16

Sort by

- Sort by
- Title A-Z
- Title Z-A
- Price Low-High
- Price High-Low
- Reference A-Z
- Reference Z-A
- Most Recent
- Oldest
- Top Sellers



ASOS Bandeau Dress with Structured Fold  
€85.28



ASOS One Shoulder Dress in Rainbow Print  
€52.48



ASOS Mesh Pencil Dress with Contrast Top  
€52.48



ASOS Slinky Bodycon Dress with Ruched Sides  
€45.92



ASOS Swing Dress in Watercolour Print  
€52.48



ASOS Cotton Summer Dress with Cross Strap Detail  
€39.36



ASOS One Shoulder Dress with Corsage Flower  
€52.48



ASOS Stripe Dress with Pleated Skirt  
€59.04



Vila Ditsy Floral Bandeau Dress  
€28.86



ASOS Dress with Peter Pan Collar and Open Back  
€52.48



ASOS Pencil Dress with Double Strap  
€65.60

MORE COLOURS



ASOS Linen Pencil Dress with Pleat Neckline  
€59.04

1392 styles found

1 2 3 4 5 ... 70 Next »

17.

Please indicate how motivated you are to search the right product to purchase?

Not motivated



Motivated

18.

Please use the series of descriptive words listed below to indicate your feelings while buying clothes in a shopping environment like this .

Frustrated



Fulfilled

Unsatisfied



Satisfied

Unpleasant



Pleasant

Hard



Easy

19.

How likely are you to purchase a product from this kind of web shop?

Unlikely



Likely

**Now two other scenario's will be shown.**

Each scenario contains three images. Brand is in this case not important, therefore only the brand ASOS is used to keep it neutral. Please look at the images carefully!

## Scenario 1



ASOS Marilyn Pleated Prom Dress

€111.52

MORE COLOURS

20.

What do you think of the price of this dress?

inexpensive



expensive



ASOS SALON Beaded Cluster Dress  
€196.80



ASOS SALON 3D Flower Bodice Dress  
€157.44



ASOS SALON Organza Floral Shift Dress  
€124.64



ASOS Marilyn Pleated Prom Dress  
€111.52

MORE COLOURS



ASOS SALON Beaded Trapeze Dress  
€196.80



ASOS Ruffle Front Tailored Shift Dress  
€52.48



ASOS Suede Shift Dress With Cut-Out Detail To Back  
€124.64



ASOS Suede Bandeau Dress  
€124.64



ASOS Multi Strap Embellished Dress  
€111.52



ASOS SALON Chiffon Midi Dress  
€111.52



ASOS SALON Puff Sleeve Strap Dress  
€72.16



ASOS SALON Beaded Frill Back Dress  
€196.80



ASOS PREMIUM Cutwork Leather Dress  
€196.80



ASOS REVIVE Dress in Digital Print Silk Kimono  
€111.52



ASOS Mesh Double Layer Fitted Waist Dress  
€52.48



ASOS REVIVE Maxi Dress in Hammered Satin  
€124.64

21.

What do you think of the price of the dress in the red frame?

inexpensive



expensive



ASOS Ruffle Front Tailored Shift Dress  
€52.48



ASOS Mesh Double Layer Fitted Waist Dress  
€52.48



ASOS SALON Puff Sleeve Strap Dress  
€72.16  
MORE COLOURS



ASOS Marilyn Pleated Prom Dress  
€111.52  
MORE COLOURS



ASOS SALON Chiffon Midi Dress  
€111.52



ASOS Multi Strap Embellished Dress  
€111.52



ASOS REVIVE Dress in Digital Print Silk Kimono  
€111.52



ASOS Suede Bandeau Dress  
€124.64



ASOS Suede Shift Dress With Cut-Out Detail To Back  
€124.64



ASOS REVIVE Maxi Dress in Hammered Satin  
€124.64



ASOS SALON Organza Floral Shift Dress  
€124.64



ASOS SALON 3D Flower Bodice Dress  
€157.44



ASOS PREMIUM Cutwork Leather Dress  
€196.80



ASOS SALON Beaded Trapeze Dress  
€196.80



ASOS SALON Beaded Cluster Dress  
€196.80



ASOS SALON Beaded Frill Back Dress  
€196.80

22.

What do you think of the price of the dress in the red frame?

inexpensive



expensive

Scenario 2



ASOS Dress in Pretty Floral Print  
€39.36

23.

**What do you think of the price of this dress?**

inexpensive            expensive



ASOS Tailored Pleat Waist Tulip Dress  
€24.93



ASOS Pleated Bandeau Dress  
€45.92  
MORE COLOURS



ASOS PETITE Exclusive Printed 2 in 1 Dress  
€39.36



ASOS Cheesecloth Bandeau Mini Dress  
€26.24



ASOS Tailored Cowl Neck Pencil Dress  
€19.68



ASOS Round Neck Pleat Waist Knitted Dress  
€19.68



ASOS Mini Dress with Twist Bust Floral Print  
€32.80



ASOS Tailored Off Shoulder Fitted Waist Dress in the style of Cameron Diaz  
FROM €20.99



ASOS PETITE Exclusive One Shoulder Chiffon Asymmetric Dress  
€26.24



ASOS Keyhole Waisted Dress  
€32.80



ASOS Tailored Ponti Contrast Panel Pencil Skirt Dress  
€26.24



ASOS One Shoulder Dress with Chiffon Waterfall  
€52.48



ASOS Summer Dress with Bow Back Detail  
€32.80



ASOS Dress in Pretty Floral Print  
€39.36



ASOS Summer Dress with Off Shoulder  
€32.80



ASOS Colour-Block Dress with Ruffle Front  
€39.36

24.

What do you think of the price of this dress?

inexpensive



expensive



ASOS Round Neck Pleat Waist Knitted Dress  
€19.68



ASOS Tailored Cowl Neck Pencil Dress  
€19.68



ASOS Tailored Off Shoulder Fitted Waist Dress in the style of Cameron Diaz  
€20.99



ASOS Tailored Pleat Waist Tulp Dress  
€24.93



ASOS Tailored Ponti Contrast Panel Pencil Skirt Dress  
€26.24



ASOS PETITE Exclusive One Shoulder Chiffon Asymmetric Dress  
€26.24



ASOS Cheese cloth Bandeau Mini Dress  
€26.24



ASOS Summer Dress with Bow Back Detail  
€32.80



ASOS Summer Dress with Off Shoulder  
€32.80



ASOS Mini Dress with Twist Bust Floral Print  
€32.80



ASOS Keyhole Waisted Dress  
€32.80



ASOS PETITE Exclusive Printed 2 in 1 Dress  
€39.36



ASOS Colour-Block Dress with Ruffle Front  
€39.36



ASOS Dress in Pretty Floral Print  
€39.36



ASOS Pleated Bandeau Dress  
€45.92  
MORE COLOURS



ASOS One Shoulder Dress with Chiffon Waterfall  
€52.48

25.

What do you think of the price of the dress in the red frame?

inexpensive



expensive

26. **How often do you use the sorting tool when you shop online?\***

- Every purchase
- Often
- Sometimes
- Rarely
- Never

27. **From the following sorting options, please rank them in order from 1- 5**  
(1 most important, 5 least important).

Price from low to high

Price from high to low

New arrival (What's new)

Most popular items

Name

28. **What does the sorting tool mean to you while purchasing from a clothing web site.**  
**Please use the series of descriptive words listed below to indicate your level (scale 1-7).**

Unimportant	<input type="radio"/>	Important
Boring	<input type="radio"/>	Interesting
Irrelevant	<input type="radio"/>	Relevant
Means nothing	<input type="radio"/>	Means a lot
Unappealing	<input type="radio"/>	Appealing
Worthless	<input type="radio"/>	Valuable
Uninvolving	<input type="radio"/>	Involving

29. **Please indicate the degree in which you would agree with the following statements by choosing a number from 1-7, where 1 indicates "strongly disagree" and 7 indicates "strongly agree".**

	<b>Strongly disagree</b>						<b>Strongly agree</b>
I use the sorting tool as an aid to help with my decisions about what product to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I let the sorting tool assist me in deciding which product to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Without the sorting tool, it is hard to find the product that fits me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
With the sorting tool it is easier for me to decide which product to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30.

**What is your gender?**

-- maak uw keuze -- ▾

31.

**What is your age?\***

- <18
- 18-25
- 26-30
- 30-40
- >40

32.

**What is your working status?\***

- Student
- Student with part-time job
- Employed
- Unemployed
- Retired
- other

33.

**What is your income in euro per month (before taxes)?**

- less than 1500
- between 1500 - 2500
- more than 2500

# Appendix B Screen captures of shopping sites without the sorting tool

## Zara.com

ZARA

IDENTIFICEER U | KOOPGIDS

WINKELMAND (0)

NIEUW DEZE WEEK  
\*\*\*

DAMES  
COLLECTIE

- Trenchcoats en parka's
- Jekkers
- Jacks
- Jurken
- Rokken
- Broeken
- Jeans
- Tricot
- Hemden
- T-shirts
- Badpakken
- Schoenen
- Handtassen
- Ceintuurs
- Halsdoeken
- Accessoires
- Laatste maten

TRF

### DAMES / COLLECTIE / JURKEN

80 artikelen

KENMERKEN ▼ KLEUR ▼ MAAT ▼

PRIJS ▲

PAGINA 1 VAN 7 | ALLES BEKUKEN | ◀ ▶



KOKERJURK  
39,95 EUR



LUREX JURK  
39,95 EUR



JUMPSUIT MET STERRENPRINT  
39,95 EUR

## Shop.hm.com

H.M SHOP ONLINE

Bestelformulier Verlanglijstje Naar de kassa 0 artikelen

[DAMES](#)
[HEREN](#)
[DIVIDED](#)
[KINDEREN](#)
[COSMETICA](#)
[HOME](#)
[SALE](#)

[Newsletter](#)
[Catalogus](#)
[Klantenservice](#)
[Mijn pagina](#)
[Inloggen](#)
[Nieuwe klant](#)

[Campagnes](#)
[Nieuw](#)
[Tops](#)
[Truien/vesten](#)
[Blouses](#)
[Broeken](#)
[Jeans](#)
[Jurken/rokken](#)
[Korte jurken](#)
[Lange jurken](#)
[Rokken](#)
[Laat alles zien](#)
[Jassen/blazers](#)
[MAMA](#)
[BIB maat 44 - 54](#)

Laat alles zien - 169 Artikelen

Jurk 14,95	Jurk 14,95	Jurk 9,95	Jurk 9,95	Rok 4,95	Jurk 19,95
Rok 7,95	Jurk 9,95	Jurk 9,95	Rok 24,95	Jurk 14,95	Jurk 14,95

◀ ▶ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15