Consumers’ online purchase intention in cosmetic products

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Abstract

**Title:** Consumers’ online purchase intention in cosmetic products  
**Course/Level:** 2FE16E:3/ Bachelor thesis  
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**Key words:** Online purchase intention, trust, perceived risk, shopping enjoyment, site design quality, cosmetic online stores, E-commerce.

**Background:** E-commerce is an evolving market; the number of retailers and the growth in online shopping has built up a competitive market. It is therefore essential for companies to continuously develop their online activity to remain and attract new customers. To do so, companies need to create value for the customers and meet their demands: therefore it is of great importance for companies to understand consumers’ buying behavior, and moreover investigate in which factors are related to the consumers’ online purchase intention.

**Purpose:** The purpose is to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention.

**Hypotheses:** The authors of this study set up the following hypotheses:  
H1+: Trust is positively related to consumers’ online purchase intention.  
H2-: Perceived risk is negatively related to consumers’ online purchase intention.  
H3: Shopping enjoyment is related to consumers’ online purchase intention.  
H4+: Site design quality is positively related to consumers’ online purchase intention.

**Methodology:** Survey study.

**Conclusion:** Hypothesis 1 was supported in this study. Hypothesis 2 was not supported in this study. Hypothesis 3 was supported in this study. Hypothesis 4 was supported in this study.
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1. Introduction

The introduction involves a background of the chosen topic: the electronic commerce evolution and related matters to the subject. The background is followed by a problem discussion where the challenges of the e-commerce are discussed and more specifically what factors are related to online purchase intention.

1.1 Background

Electronic commerce, also called e-commerce is according to Turban et al. (2008) the process that involves transactions between a company and its customers through a digital platform on the Internet. The trade can include the sale of goods, services and information (Turban et al., 2008) and the online trade is independent of time and place (Solomon et al., 2010). Turban et al. (2008) explains that e-commerce enables businesses to no longer need a physical contact with their customers in order to carry out a transaction.

Businesses strive to economically succeed in the marketplace (Solomon et al., 2010) and it starts with understanding the consumers’ needs and wants in order to capture them (Armstrong et al., 2009). By understanding the consumers, companies will harvest rewards in terms of market share and profits (Armstrong et al., 2009). Purchase intention is the plan to buy a specific product or service within a designated time period (Hair et al., 2011). If the level of purchase intention among consumers is high, the level of purchase is likewise (Brown et al., 2003). According to Solomon et al. (2010) the digital market is one of the most substantial influences on consumer behavior. The technology has changed how and where consumers acquire their information (Cummins et al., 2014). One main difference between the traditional market and the online market is that different characteristics influence consumer behavior in an online setting (Constantinides, 2004). For instance, IT-related features are ignored in consumer behavior since consumers do not face IT in physical stores (Gefen et al., 2003). On the other hand, IT-related features have an increased role of importance in influencing online consumer behavior (McKnight & Chervany, 2001; Pavlou & Fygenson, 2006). It is of importance that companies understand the online market’s different characteristics and customers’ buying behavior in order to meet the consumers’ needs in an online context hence, turn current browsers to customers and increase current customers purchases (Forsythe & Shi, 2003).
Many companies have shifted their businesses from traditional physical form to online context (Gustafsson, 2012). The Internet has a growing influence on the society (Evans, 2008) in terms of how customers and sellers interact in the marketplace (Cummins et al., 2014) moreover people can easily obtain what they wish due to the accessibility the Internet provides (Solomon et al., 2010). In the end, this implies that companies have more opportunities to expand their businesses on the web (Evans, 2008). It has been argued that the impact of the Internet will proceed to expand as more and more people around the world log on (Solomon et al., 2010).

1.2 Problem discussion

Companies usually strive to generate profit and in order to do that they need to attract consumers to their businesses (Armstrong et al., 2009). E-commerce is an evolving market (Constantinides, 2004), the number of retailers and the growth in online shopping has built up a competitive market and therefore it is essential for companies to continuously develop their online activity (Szymanski & Hise, 2000). When companies possess competence in e-commerce, they can recognize potential areas for customer value growth and attract new customers through value creating offers (Saeed et al., 2005). In order to create customer value growth, it is of great importance for the companies to understand online consumers’ buying behavior (Pui-Mun, 2002; Saeed et al., 2005) and moreover investigate in which factors that affect the consumers’ online purchase intention (Constantinides, 2004; Hair et al., 2011). The main reason for why online purchase intention is of such importance for firms is because it is a strong predictor of actual online purchase (Pavlou, 2003; Kim et al., 2008).

According to Hong and Cha (2013), the e-commerce businesses could increase the online purchase intention by striving to improve the consumers’ trust. Crespo et al. (2009) suggests that this can be accomplished by strengthening trust in the transactions. Hong and Cha (2013) further state that e-commerce businesses could put efforts to decrease the perceived risk, due to the supposed importance of risk reduction in online purchase intention (Pavlou, 2003; Crespo et al., 2009). According to Pavlou (2003) and Crespo et al. (2009) and Hsu et al. (2014) further research is needed about trust and perceived risk, given their indicated importance on online purchase intention. Research is also needed about other related factors in order to
gain a more rich understanding about e-commerce and consumers’ online purchase intention (Pavlou, 2003; Hsu et al., 2014). Childers et al. (2001) and Wann-Yih and Ching-Ching (2015) suggests more specifically that consumers’ shopping enjoyment, the perceived pleasure of using a website, needs further investigation, because shopping enjoyment appears to be related to consumers online purchase intentions (Im & Ha, 2011; Wann-Yih & Ching-Ching, 2015). Yu-Hui and Barnes (2007) are in agreement with Pavlou (2003) that other related factors in online purchase intention should be examined and suggests that the site design quality seems to be an important factor.

It appears to be a lack of previous studies that have tested these different alleged important factors, trust, perceived risk, shopping enjoyment and site design quality and their relationship to consumers’ online purchase intentions.

1.3 Purpose

The purpose is to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention.
2. Theoretical chapter

The following chapter presents the theory that has been utilized in this study, the theory was gathered and reviewed by the authors. The theory is presented in five sub headlines: purchase intention in e-commerce, trust, perceived risk, shopping enjoyment and site design.

2.1 Online purchase intention

The theory of reasoned action is considered to be an influential explanation of the process that determine peoples’ intentional behaviour (Boster et al., 2014). People generally consider the results that their actions will have before they decide to perform a certain action (Ajzen & Fishbein, 1980). The theory of reasoned action is used in order to predict a person’s intention to behave in a certain way, this is done by evaluating a person’s attitude towards a specific behaviour as well as the subjective norms of influential people and groups that could affect the person’s attitude (Ajzen & Fishbein, 1980). Subjective norms are persuaded by ones perception of the beliefs of the people around us, for example, parents, friends or colleagues (Ajzen & Fishbein, 1980). Subjective norms influence us since we have certain beliefs of how the people will react to our behaviour, and whether they will accept it or not (Ajzen & Fishbein, 1980). The subjective norms influence consumers’ online purchase intention through the attitude consumers have towards online shopping (Hansen et al., 2004).

Attitudes influence consumers’ online intention to purchase (Korzaan, 2003). Lim and Dubinsky (2005) supported the latter and stated that consumer attitudes towards online shopping affects if consumers have intentions to purchase online. Hansen et al. (2004) concluded that consumers attitude toward online shopping is a predictor of online shopping. Consumers’ attitude toward the behaviour of shopping online is a determinant of behavioural intention (Hansen et al., 2004). In order for online purchase intention to exist the consumers must perceive the benefits of shopping online instead of in physical stores (So et al., 2005).

Purchase intention is the plan to buy a specific product or service within a designated time period (Hair et al., 2011). Moreover, online purchase intention is affected by the consumers’ determination to purchase from an e-commerce business (Salisbury et al., 2001; Choon et al., 2010). When consumers are familiar with e-commerce businesses,
they are more likely to visit an online site with the intention to purchase (Forsythe & Shi, 2003; Gefen & Straub, 2004; Yu-Hui & Barnes, 2007). The familiarity in e-commerce means that the consumers have an understanding for what is happening in that context and why, and also what is going to happen next (Gefen, 2000; Gefen & Straub, 2004).

Companies need to meet the demands of the consumers in terms of their needs and wants in order for purchase intention to increase (Forsythe & Shi, 2003). Online purchase intention is a significant predictor to actual purchase (Pavlou, 2003; Kim et al., 2008). Online purchase intention is used to reach the goal of actual purchase (Lee & Lee, 2015). Consumers’ actual buying behavior is dichotomous because consumers either have to purchase or not purchase the item (Lee & Lee, 2015).

2.2 Trust

In a general sense, trust is explained as the willingness of someone to be exposed to the activities of another one, which is established through the anticipation that the other one will act in a particular fashion, which is important to the trustor (Mayer et al., 1995). Morgan and Hunt (1994) explained trust as the faith that the trustee will perform in an advantageous manner, the belief that the trustee will not do the trustor any harm. Morgan and Hunt (1994) further stated that trust is essential for a company’s success. Trust is defined as the consumer’s belief that the e-business will not act in an opportunistic (e.g. taking advantage of a situation) way (Hong & Cha, 2013).

According to Pui-Mun (2002) one of the first things a consumer does when visiting a website is to ensure that the website is trustworthy and reliable in order to develop the trust that is needed for the consumer to proceed the visit on the site. Kim et al. (2008) stated that the reputation of the e-commerce business affects whether or not the consumers will trust them as a seller. Pei et al. (2014) also concluded that e-commerce businesses should therefore focus on building a good reputation because it enhances trust. A good reputation can be built from offering customer support, where customers can receive help from the e-commerce business (Kim, 2012). Pui-Mun (2002) stated that information about the company behind the website develops the trust, which is also in accordance with the findings of Koufaris and Hampton-Sosa.
When consumers trust in an online website, that empowers them to take certain risks (McKnight, 2002). Trust appears to be an influential factor on consumers’ online purchase intentions (Pavlou, 2003; Kim et al., 2008).

Yu-Hui and Barnes (2007) emphasized the importance for companies to build trust because of its claimed direct relation to online purchase intention and actual purchase. Thus, creating the trust is complex due to the fact that the transactions are more detached and anonymous which could affect the consumers’ purchase intention (Yu-Hui & Barnes, 2007). Therefore:

\[ H1^+: Trust is positively related to consumers’ online purchase intention. \]

### 2.3 Perceived risk

The perceived risk online is explained as consumers’ beliefs about possible doubtful negative consequences from online transactions (Kim et al., 2008: Soto-Acosta et al., 2014). Consumers generally create a perception of the level of risk with an e-commerce business based on the information communicated on the website regarding the efforts of safeguarding the customers’ personal information and the security in the transactions (Lim, 2003; Kim et al., 2008).

#### 2.3.1 Perceived risk due to unstructured and overload information

Companies should utilize their websites as a platform for displaying information about themselves, their products and services (Huang, 2000; Lim, 2003). Soto-Acosta et al. (2014) concluded that if companies include comprehensive information on their website, the customers would perceive lower levels of risk, which, in turn will have a positive effect on the customers’ purchase intention. Lurie (2004) stated that the structure of the provided information affects the perceived amount of information and that a lot of information could denote a greater likelihood of information overload. Large amount of information is according to Chen et al. (2009) not to the customers’ benefits because an excess of information could affect customers’ online purchase intention negatively. A proper amount of information is considered to be the degree the information provided could be processed by the consumers without trouble (Sicilia & Ruiz, 2010). Sicilia and Ruiz (2010) concluded that enough information provided on a website appeared to increase the online purchase intention. Soto-Acosta et al. (2014) agreed with the latter and also suggested that the information that is
incorporated on the website should be organized since unstructured information and information overload could increase the perception of risk among the consumers, which in turn could possibly negatively affects the online purchase intention.

2.3.2 Perceived risk due to transaction security and privacy
The perception of risk among consumers creates a tremendous barrier to transact online (Pavlou, 2003). Salisbury et al. (2001) explained that websites should display information to their consumers that declares that action have been taken proactively in order to safeguard the consumers’ personal information. Flavian and Guinaliu (2006) agree with the latter and also concluded that protection of consumers’ personal information could affect the intention to buy online. An e-commerce business should also aware their consumers that they deal with web and transaction security in order to ensure the consumers that a purchase can be completed without any risks (Pui-Mun, 2002; Koufaris & Hampton-Sosa, 2004; Hong & Cha, 2013). The concerns about the risks when revealing personal information and performing transactions online, has apparently lead to customers more consciously and cautiously choose companies that provides safe online environments (Alharbi et al., 2013). A perception of a high level of security in the transactions is likely lead to a greater intention to purchase from that e-commerce business (Salisbury et al., 2001). Both information privacy and transaction security are of importance for consumers when dealing with an e-commerce business, the perceived risk generated from that, could possibly reduce the purchase intention (Kim et al., 2008). Therefore:

H2: Perceived risk is negatively related to consumers’ online purchase intention.

2.4 Shopping enjoyment
Online shopping enjoyment is the perceived pleasure originated from a website experience, the degree to which the activity of using a website is perceived by the consumers to be enjoyable (Ingham et al., 2015). Consumers that enjoy shopping attain pleasure from shopping and spending time browsing for products (Seock & Bailey, 2008). The feeling of enjoyment felt while visiting a website can increase the online purchase intention among consumers by contributing to an enjoyable shopping experience, hence it is of great importance for companies operating on the web to recognise the impact the enjoyment of the website has (Im & Ha, 2011). Wang et al.
(2013) appears to agree with the latter and stated that perceived enjoyment could possibly influence consumers online purchase intention. It is also supported by Van der Heijden and Verhagen (2004) that stated that enjoyment is an important construct that will affect consumers online purchase intention, they further stated that online companies would benefit from making their websites more enjoyable. Choon et al. (2010) did not agree with the previous studies because the study’s hypothesis regarding shopping enjoyment being positively related to online purchase intention was rejected. Hence, they draw the conclusion that shopping enjoyment does not positively affect consumers purchase intention in an e-commerce setting. This is in accordance with Verhoef and Langerak (2001) that stated that shopping enjoyment does not influence online consumers’ purchase intentions positively. Cai and Xu (2006) also discuss this matter and states that shopping enjoyment is not directly related to consumers’ online buying behaviour.

The perception of an online store has a direct effect on consumers shopping enjoyment that in turn is enhancing consumers purchase intentions (Kim et al., 2007). In order to attract the consumers that value shopping enjoyment companies should add entertainment features to their website, such as providing interactive networking communities for customers by doing so companies that could encourage the consumers to purchase online (Seock & Bailey, 2008).

According to Kim et al. (2007) some products require a more in-depth description and therefore it is suggested that 3D virtual models could be used, which is a more advanced technology, by experience that kind of technology on a website that might lead to a higher level of shopping enjoyment among the consumers which then will enhance the consumers purchase intentions. Therefore:

\[ H_3: \text{Shopping enjoyment is related to consumers’ online purchase intention.} \]

2.5 Site design quality
As the online market expands, the design of websites becomes a critical factor of success (Kim et al., 2003). The website is the main connection between the company and the consumers, therefore the design of the website becomes as essential as a store’s layout (Kim et al., 2003). There are several elements of a website design
quality that consumers generally value, for example, attractiveness, content usefulness and ease of navigation (Al-Qeisi et al., 2014). Customers purchase intentions on a website appears to be influenced by his or hers perception of the quality of the website, therefore companies should create websites with attractive design and useful content, in order to attract more customers to their businesses (Aladwani, 2006).

2.5.1 Attractiveness of site design
An upgrading of the design and appearance of a website will likely lead to an enhancement of consumers online purchase intentions (Al-Qeisi et al., 2014). While designing a website, a lot of focus should be put into the overall graphical look and the appearance of the website, which includes colors, images and shapes (Cyr, 2013). These features are of importance since it will convey certain meaning to the consumers (Cyr, 2013). Furthermore, it is essential that the images that are used on a website is of high quality and if it is a website offering products it is advantageous to include several product shots and from multiple angels (Cyr, 2013). The influence and atmosphere of a website has a significant impact on the consumers’ attitudes and level of emotional arousal, subsequently, this could result in higher online purchase intention among the consumers (Wu et al., 2014). The website design tends to affect consumers behavior through attitude towards the website and company, meanwhile the atmosphere generally influence consumers behavior through emotional arousal (Wu et al., 2014). Wu et al. (2014) more specifically states that businesses cooperating online could use bright and lively colors to create a happy atmosphere on their website since that could increase the online purchase intention among the consumers.

2.5.2 Content usefulness
Content is considered to be a very influential component while creating a website with high quality (Kincl & Strach, 2012). Companies would benefit from designing their website with well-organized content displays, a large selection of products and helpful signage in order for the consumers to be positively influenced (Wu et al., 2014). The information on the website should be correct, informative, relevant and up to date (Hernandez et al., 2009). Rather than focusing on the quantity of information on a website, companies should focus on the quality and provide relevant, easy to digest and easy accessible information (Thongpapani & Ashraf, 2011).
2.5.3 Ease of navigation

Navigation is considered to be a very influential component while creating a website with high quality (Kincl & Strach, 2012). To enhance the ease of navigation on a website companies should have a search bar where the consumers can search for the specific information they are looking for (Cyr, 2013). Since disorientation is one of the most common navigation problem (Ruttun & Macredie, 2012). Additionally, the website should have categories and subcategories, for example, filters of product lines so that the consumers easily can compare the products that are of relevance for them (Cyr, 2013). Therefore:

\[ H4^+: \text{Site design quality is positively related to consumers’ online purchase intention.} \]
3. The conceptual framework for the research
Through the gathered theory that is presented in the previous chapter, the authors have created a conceptual framework that demonstrates how the study will be conducted.

The chosen factors of importance that are related to consumers’ online purchase intention in this study are: trust, perceived risk, shopping enjoyment and site design quality as presented in the conceptual framework above in figure 1. Moreover, no one has to the knowledge of the authors tested these chosen factors in relation to online purchase intention in the same study before. Trust appears to be an essential component for a company to succeed in the online marketplace (Yu-Hui & Barnes, 2007). Decreasing the perceived risk online has appeared to increase the online purchase intention (Pavlou, 2003; Crespo et al., 2009). Shopping enjoyment could possibly increase the online purchase intention among consumers and is of importance to be recognized in order to examine the possible impact the enjoyment of a website has (Im & Ha, 2011). Site design quality is of importance because consumers’ first opinion about an online site could depend on the web site’s appearance (McKnight et al., 2002).
4. Method

This chapter presents information about how quantitative research methods should be conducted and how the authors have gone about in this study. The chapter is divided in different sub headlines and describes both theoretical and practical implementation of this study.

4.1 The nature of business research

4.1.1 Inductive versus deductive

While conducting a business research there is mainly two different approaches that can be used to conduct the research, it can be either from an inductive or a deductive point of view (Bryman & Bell, 2011). A deductive approach is when new theory is developed based on already existing theories and this is the most common view of the relationship between theory and research (Bryman & Bell, 2011). More specifically, a deductive approach starts with collecting a theoretical base that the research uses as a starting point. In order to build a strong theoretical base to proceed from a lot of research has to be done, the theories are being carefully reviewed and then questioned or reformulated (Ghauri & Gronhaug, 2005). Thereafter hypotheses are created in order to advance the existing theory; this is done by a thorough review of previous literature regarding concepts or theories that are being studied (Bryman & Bell, 2011). On the basis of the theory, the hypotheses have to be carefully formed so that they can be tested in the empirical investigation (Bryman & Bell, 2011). This is done by an operationalization, which makes the theoretical concepts applicable to the reality (Bryman & Bell, 2011).

In comparison with the deductive approach, the inductive approach is the process where theory is created as a result from the empirical investigation (Bryman & Bell, 2011). The process of induction is when researchers draw generalized conclusions from their observations (Bryman & Bell, 2011). In an inductive process, researchers find a problem that should be explored, thereafter they perform observations and from the empirical information they draw general conclusions regarding the issue (Bryman & Bell, 2011). One of the main critics this approach has to deal with is the question of whether empirical information from a number of observations could be regarded as science (Bryman & Bell, 2011). This is because the conclusions in an inductive
research are done based on only empirical information gathered from the researchers themselves and not any previous research (Bryman & Bell, 2011).

In this study the researchers proceed from existing theories regarding the factors, trust, perceived risk, shopping enjoyment and site design quality, and how these factors are related to consumers’ online purchase intentions. The factors are tested together in a new context, which is the luxury industry, more specifically focusing on cosmetic products. The hypotheses were created with current theory as a foundation in order to test if they were supported or not supported when tested together and in a new context: hence a deductive approach has been used in this study.

### 4.1.2 Qualitative versus quantitative

Inductive and deductive approaches are associated with either qualitative or quantitative studies. Using an inductive approach is often associated with a qualitative study since a qualitative study is not as formal, structured and controlled (Bryman & Bell, 2011). For quantitative studies, the deductive approach is the most suitable, because the theories already exist but the new created hypotheses shall be tested. In order to draw conclusions that either supports or does not support the stated hypotheses, an extensive amount of data is required (Ghauri & Gronhaug, 2005).

A quantitative method is used with the intent to collect data that is measurable and quantifiable (Ghauri & Gronhaug, 2005). The empirical data from quantitative studies includes a lot of figures that are applied into computer software and coded (Bryman & Bell, 2011). The research method collects a large amount of data that will in results provide confidence of generalizability. The generalizability of the results is often emphasized in quantitative studies (Ghauri & Gronhaug, 2005; Bryman & Bell, 2011). Quantitative studies are often conducted when the researcher is interested in testing relationships between variables (Bryman & Bell, 2011). The quantitative study’s starting point is that the researcher builds up hypotheses from existing knowledge that can be tested with quantifiable techniques in order to better explain or describe the relationships thus the reality (Bryman & Bell, 2011). If the research is of a quantitative nature it is most common to use a deductive approach in order to draw logical conclusions, although a deductive approach can be used while preforming a qualitative study as well (Ghauri & Gronhaug, 2005).
The aim in a qualitative study is to gather data that are interpretable (Bryman & Bell, 2011). The main difference between a quantitative and a qualitative study is that quantitative data utilize measurement and qualitative does not (Ghauri & Gronhaug, 2005). A qualitative method is appropriate when the purpose of the study is to explore and with an emphasis on understanding (Ghauri & Gronhaug, 2005). A qualitative study can create a deeper understanding of the stated problem by gathering the data from focus groups, interviews or observations (Hair et al., 2011).

In this study the authors start with existing theories that explains that trust, perceived risk, shopping enjoyment and site design quality are related to consumers’ online purchase intention. The hypotheses were created from existing theories to see if they will be supported or not supported. A quantitative approach has been utilized in this study.

4.2 Research design

A research purpose is related to the principles that are employed when examining business research. The research design is therefore a framework for the approach the researchers intend to have when answering the study’s research problems (Bryman & Bell, 2011). The most common forms of research studies related to marketing is: exploratory research, explanatory research and descriptive research. Based on the identified research problem(s) an appropriate research purpose is selected (Ghauri & Gronhaug, 2005).

If the research problem is vague and there is little previous research, an exploratory purpose is suitable for the study (Ghauri & Gronhaug, 2005; Bryman & Bell, 2011). In an exploratory study the researcher is allowed to be flexible, the study can take a different turn when the empirical data is gathered because the research area and the research problem is not clear (Ghauri & Gronhaug, 2005). In most cases, an exploratory purpose is used in qualitative studies (Ghauri & Gronhaugh, 2005; Bryman & Bell, 2011, Hair et al., 2011).

A descriptive research purpose is clearly stated and to the point (Hair et al., 2011). The descriptive research is structured, the data gathering involves a structured process
and follows clear set of rules in the execution of the research (Ghauri & Gronhaug, 2005). A descriptive research could involve more than one variable, but the researcher is usually interested in deepen the knowledge in a phenomenon (Ghauri & Gronhaug, 2005). Descriptive research is designed to ask questions as who, when, how, which, what and why (Ghauri & Gronhaug, 2005; Hair et al., 2011). A descriptive research can be used in both quantitative and qualitative studies (Bryman & Bell, 2011; Hair et al., 2011).

An explanatory research is suitable when the relationship between two or more variables is to be examined (Ghauri & Gronhaug, 2005). The problem is often in these studies to explain how the variables are related (Ghauri & Gronhaug, 2005). It is important in an explanatory research to have control of the independent variable(s) in order to know if and how they are related to the dependent variable (Bryman & Bell, 2011).

In this study the authors discussed what research design would be most suitable for the study. The exploratory design was eliminated due to the fact that purchase intention has been well studied before. The authors were interested in explaining the relationship between trust, perceived risk, shopping enjoyment and site design quality and online purchase intention. From the purpose of the study, either the descriptive or the explanatory design would be chosen. The explanatory design is suitable for a quantitative study and it provides the opportunity to examine if and how different variables are related to each other. The explanatory design provides an opportunity to deepen the theoretical knowledge within a research area. The authors wanted to explain the relationship between trust, perceived risk, shopping enjoyment and site design and online purchase intention. The explanatory design was suitable for the study because it provides the opportunity to explain if the variables are related. This lead up to the fact that this study has an explanatory research purpose.

A research design provides guidelines for conducting the study and the design should be chosen based on the fact that it can provide with relevant information to meet the study’s purpose (Hair et al., 2011). It is common for research in marketing to conduct experimental design, longitudinal research design, cross-sectional (social survey design), case study design or comparative research design (Bryman & Bell, 2011).
Data can be gathered in different ways, during a certain occasion or at several occasions (Bryman & Bell, 2011).

Cross-sectional studies, often called a social survey design, entails that the data is collected at a given time from a sample that been chosen from a population (Hair et al., 2011) and the data is collected on more than one case (Bryman & Bell, 2011). Bryman and Bell (2011) further explains that *more than one case* is related to variation, where variation could be in respect of people, nations, states etc. It is common that cross-sectional design has a quantitative approach and the quantitative character enables the researcher to conduct a formalized and structured research process (Christensen et al., 2010). A common strategy for a social survey design is surveys (Bryman & Bell, 2011). For this study, a social survey design was chosen to gather the data.

**4.3 The luxury goods industry**

Previous research has concluded that the industry context is important and should be taken into consideration. Kim et al. (2005) discuss that the same factors may have different values due to the e-commerce context, specifically which industry it concerns. Kim et al. (2003) explains that each industry possess different characteristics, therefore different factors are related to *online purchase intention* differently. For instance, the factor *shopping enjoyment* was concluded to be a stronger predictor in electronic products than in grocery products (Childers et al., 2001).

The luxury-goods industry has over the past years despite the economic set backs flourished (The Economist, 2014). Over the past twenty years, the number of luxury-goods customers has more than tripled whereas the spending in the industry has increased in a comparable degree (The Economist, 2014). According to Rigby and Tager (2014) the digital revolution has come with a great threat but also with a great opportunity for the luxury industry, what is important is that the luxury industry obtains digital technology but not compromising the core values of what the luxury industry is. The luxury industry includes fashion (apparel, handbags and shoes), *cosmetic products* and jewelries (Statista, 2014).
The cosmetic industry is made of several segments which are: *skincare, haircare, make-up, fragrance* and *personal hygiene* (Kumar, 2005). The demand for cosmetic products has been growing the last years due to customers’ high spending in cosmetic products (Statista, 2014). The cosmetic industry is a competitive market (Brandt, 2012). Customers can purchase their wanted cosmetic products both in physical stores and online (Kumar, 2005). This study will focus on the cosmetic industry’s products. Thus, the created conceptual model for this study will test the relationship between *trust, perceived risk, shopping enjoyment, site design quality* and *online purchase intention* within the cosmetic industry.

### 4.4 Data sources

The empirical data can be gathered in two ways, from primary sources and secondary sources (Bryman & Bell, 2011). Primary sources are information gathered primarily for a research, primary sources could be: interviews, surveys, case studies, focus groups (Bryman & Bell, 2011).

There are both advantages and disadvantages with the two different data sources (Bryman & Bell, 2011). What is favorable with the primary sources is that they are updated and gathered for the study’s specific purpose, which makes it provide the information the study intends to investigate (Christensen et al., 2010). Although, it can be problematic with primary sources because it is time consuming and expensive to conduct (Bryman & Bell, 2011). The advantage of secondary sources is that they are time and cost efficient but the data could have been influenced by the previous researcher’s subjectivity (Christensen et al., 2010).

Primary sources are used in this study: the reason is the absence of studies that have examined exactly what the authors wanted to investigate. The primary sources enabled the authors to collect relevant information in order to answer the purpose of the study.

### 4.5 Research strategy

One research strategy is surveys, which is according to Bryman and Bell (2011) appropriate when the researcher is interested in collecting data that will provide results in terms of statistics. The survey enables the researcher to gain control over the
research process (Saunders et al., 2009). The results of the survey can be analyzed and compared but it also provides a generalizable picture, which can be applied to an entire population (Saunders et al., 2009; Bryman & Bell, 2011). The respondents in a survey constitute the sample of the targeted population the study aims to investigate. It is important that the sample represents the population in order for the results to be reliable and generalizable (Bryman & Bell, 2011). The researcher will have to spend time ensuring that the sample is representative for the whole population, piloting the data collection instrument and trying to ensure that the response rate is good (Saunders et al., 2009).

Yin (2014) has concluded three conditions in order to make a decision regarding which strategy is suitable for a specific study. The three conditions are: 1) the type of research question stated, 2) the required control of behavioral events, and 3) the extent of focus on current events (Yin, 2014). The authors evaluated the figure presented in Yin (2014) and the theory regarding the different strategies in order to decide which strategy was most suitable for this study. When to use each strategy is presented in figure 2, on the next page. This study aims to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention, therefore is survey considered as a suitable strategy. The decision is based on the fact that there is no required control over behavioral events but there is a focus on contemporary events.
<table>
<thead>
<tr>
<th>Research strategy</th>
<th>1) Form of research question</th>
<th>2) Required control of behavioral events</th>
<th>3) The extent of focuses on current events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>How, why?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey</td>
<td>Who, what, where, how many, how much?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Archival Analysis</td>
<td>Who, what, where, how many, how much?</td>
<td>No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>History</td>
<td>How, why</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Case study</td>
<td>How, why</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Figure 2: Research strategies (Yin, 2014, p. 9).

Once the researcher has collected the data, the researcher is independent of others’ information (Saunders et al., 2009). There are several data collection techniques that fall under the survey strategy such as questionnaire, structured observation and structured interviews (Saunders et al., 2009). For this study, survey is the chosen strategy and questionnaire is the data collection technique.

### 4.6 Data collection method

There are different instrument that researchers can use for data collection, depending on whether it is a qualitative or quantitative study (Bryman & Bell, 2011). This study is a quantitative study and therefore the qualitative data collection methods was excluded, such as focus groups, unstructured interviews, semi structured interviews and unstructured observations. When a quantitative study is performed the data is gathered through experiment, structured observations, structured interviews or questionnaires (Ghauri & Gronhaug, 2005).

When the data collection is done through an experiment, the participants that are involved in the experiment are observed within extremely controlled circumstances (Bryman & Bell, 2011). The participants are treated as data and they are exposed to some kind of stimulus caused by the researchers in order to see if the specific stimulus, also referred to as the independent variable, has any effect on the dependent variable.
While performing an experiment the researchers must be extremely careful and control the independent variable, to make sure that it is the independent variable that is affecting the dependent variable, in order to control that no other factors are influencing the results (Bryman & Bell, 2011). Due to the lack of time and the fact that there was no possibility for the researchers to control the settings were the study could be performed, the experimental design was not considered in this study.

A structured observation is a quantitative data collection method where the researchers study a specific phenomenon in its natural environment; it is a method for systematically observing the behaviour of individuals (Bryman & Bell, 2011). The researchers observe the behaviour of the respondents while the respondents are unaware of it hence it allows their behaviour to be observed directly (Bryman & Bell, 2011). Consequently, the respondents do not have any possibility to change their behaviour, which could be the case if they would be aware of the fact that they are respondents in a research. If the respondents themselves would be asked to explain their behaviour the result might be too subjective and not in agreement with the reality (Bryman & Bell, 2011). The critics regarding this data collection method is questioning the credibility and validity of the method, when it comes to how applicable the results are in other context then the one in the specific study (Bryman & Bell, 2011). According to Christensen et al. (2010) structured observations does not explain underlying reasons for why people act in a certain way, hence the researchers did not use structured observations as a data collection method.

Surveys are often used in quantitative studies and it can be conducted in two different ways, either it can be a structured interview, where all the interviews are identical and the answering alternatives are decided in advanced (Bryman & Bell, 2011). Or it can be done by sending out the questionnaire to a large amount of people that answers the different questions by choosing from different answering options (Bryman & Bell, 2011). The main difference between these two approaches is that while conducting a structured interview someone has to be present to gather the information from the respondents (Bryman & Bell, 2011). In comparison with if the questionnaire is sent out, which it is more convenient to administer and it is more cost-effective (Bryman & Bell, 2011). Due to the advantages of using questionnaires this was the data
collection method the researchers chose for this study. The authors want to gather as many answers as possible during a short amount of time.

### 4.6.1 Questionnaire

A questionnaire is a research method that is conducted by asking the same questions to a large amount of respondents, in order to investigate their attitudes and opinions (Bryman & Bell, 2011). The questionnaire can be done in two ways, either with a quantitative or a qualitative approach (Bryman & Bell, 2011). A questionnaire with closed questions is a quantitative questionnaire, which is an effective way to gather information (Bryman & Bell, 2011). Although, there is a risk that the respondents could misinterpret the questions and there is also a risk that the respondents did not take the survey seriously (Bryman & Bell, 2011). The other alternative is to conduct a qualitative questionnaire, this is done when open questions are asked and the respondents can answer exactly what they want to, without any answering options (Bryman & Bell, 2011). This alternative takes a bit more time, but will give the researchers more detailed answers (Bryman & Bell, 2011). While creating a questionnaire it is important that the questions and the answering options, if there are any, are well formulated (Albaum et al., 2010). While creating a questionnaire the researchers should create few open and more closed questions, since closed questions are easier to answer (Bryman & Bell, 2011). It is also very important to take into consideration the structure and the design of the questionnaire. The questionnaire is supposed to be easy to follow and to understand (Alabaum et al., 2010).

In the creation of the questionnaire, an evaluation of which questions that are important and appropriate is made, then a population that is relevant for the subject is chosen (Christensen et al., 2010). It is of great importance to ask questions that are relevant as well as properly formulated in order to avoid leading questions (Christensen et al., 2010). When the questionnaire is answered, the gathered material is interpreted and a result can be concluded (Christensen et al., 2010). The risk with performing a questionnaire is that all the respondents could belong to the same category of people who have the same attitudes and opinions (Alabaum et al., 2010). Furthermore, a questionnaire does not give any significant information that can be used in order to create solutions, it will only show were the problem is. A questionnaire can be distributed through several different channels, for example it can
be send out by email or by post, hence it is called mail or postal questionnaire (Christensen et al., 2010). Another way to spread the questionnaire is when the researcher hands out the questionnaire to different respondents (Christensen et al., 2010). The advantage with a mail or postal questionnaire, it will reach more respondents (Christensen et al., 2010).

A questionnaire has several benefits, the most significant advantages with a questionnaire is that it is fast and easy to administer in large quantities and that the respondents can answer the questionnaire whenever they have time for it (Christensen et al., 2010). Another advantage is the fact that the respondents does not get distracted or affected by an interviewer, although this could be seen as an disadvantage as well, due to the fact that if there are any questions that the respondents does not understand or are unsure about, there is no one they can ask (Christensen et al., 2010). This can be avoided if the researchers physically hand out the questionnaire, because in that case the researchers will be there to answer the respondents’ questions (Bryman & Bell, 2011). Another disadvantage is the fact that if the questionnaire has open questions, there is no possibility for the researchers to further investigate in the answers, hence the researchers cannot explore if there is any more information to gather (Bryman & Bell, 2011). A challenge that the researchers face while conducting a questionnaire is to prevent a low response rate, which is something that is very common in this data collection method (Bryman & Bell, 2011). Individuals have a tendency to avoid participation in a questionnaire (Bryman & Bell, 2011). This can be avoided by writing an explanation of why the research is of great importance and also create as short questionnaire as possible, since this normally increases the participation rate (Bryman & Bell, 2011). Although, there cannot be too few questions because then the gathered information will not be enough to make an analysis (Bryman & Bell, 2011). A trick to increase the response rate could be to start of with more interesting questions and not ask too personal questions in the beginning of the questionnaire (Bryman & Bell, 2011). Another trick could be to give some kind of reward for participating in the survey (Bryman & Bell, 2011).

This study has followed the previous stated advice in order to create a questionnaire of high standard. The authors has carefully decided on the number of questions in order for the respondents to partake in the questionnaire, but at the same time the
authors took into account that the information that would be gathered was enough. The questions in the questionnaire are closed questions, in order to make it easier for the participants to answer as well as for the researchers to analyse the data.

4.6.2 Operationalization

Operationalization involves the conversion of concepts into measurable items; this is done in order to use the clearly defined concepts in the analysis of the study’s gathered data (Bryman & Bell, 2011). It is important to design a well-grounded operationalization that describes the concepts and how it can be used in the measurement for the specific study (Ghauri & Gronhaug, 2005). The researcher should review previous operationalizations/measurements used in order to capture the same construct (Ghauri & Gronhaug, 2005). Without the clear definitions of the different concepts in the specific study, it is impossible to connect the gathered empirical data to a theoretical basis (Ghauri & Gronhaug, 2005).

<table>
<thead>
<tr>
<th>CONCEPT: Purchase intention</th>
<th>DEFINITION: Purchase intention is the consumers’ inclination to purchase online</th>
<th>ITEMS INSPIRED BY ARTICLES:</th>
<th>SURVEY ITEMS:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>purchase online</td>
<td>Korzaan (2003)</td>
<td>I am positive towards purchasing cosmetic products online</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lim &amp; Dubinsky (2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lee &amp; Lee (2015)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gefen (2000)</td>
<td></td>
<td>It is likely that I will purchase cosmetic products from cosmetic online stores in the near future (i.e next three months)</td>
</tr>
<tr>
<td></td>
<td>Korzaan (2003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lim &amp; Dubinsky (2005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yu-Hui and Barnes (2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lee &amp; Lee (2015)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Purchase intention* is in this study defined as the consumers’ inclination to purchase online. The definition used was drawn from Hong and Cha (2013). Three items were chosen based on previous studies to measure the construct, the authors are stated next to each item of the concept.
<table>
<thead>
<tr>
<th>OPERATIONALIZATION</th>
<th>CONCEPT:</th>
<th>DEFINITION:</th>
<th>ITEMS INSPIRED BY ARTICLES:</th>
<th>SURVEY ITEMS:</th>
</tr>
</thead>
</table>
| Trust               | Trust is the extent to which a consumer believes that the e-commerce business will behave in the interest of the consumer when purchasing a product online | Pavlou (2003)  
Koufaris and Hampton-Sosa (2004)  
Yu-Hui and Barnes (2007)  
Kim et al. (2008)  
Kim (2012)  
Hong and Cha (2013)  
Pei et al. (2014) | I believe that cosmetic online stores have my best interest in mind |
| McKnight (2002)  
Pavlou (2003)  
Koufaris and Hampton-Sosa (2004)  
Yu-Hui and Barnes (2007)  
Kim et al. (2008)  
Kim (2012)  
Hong and Cha (2013)  
Pei et al. (2014) | I believe that cosmetic online stores keep their promises and commitments |
| Koufaris and Hampton-Sosa (2004)  
Yu-Hui and Barnes (2007)  
Kim (2012) | I believe that cosmetic online stores would not behave opportunistically (e.g. take advantage of a situation) |
| Pavlou (2003)  
Koufaris and Hampton-Sosa (2004)  
Yu-Hui and Barnes (2007)  
Kim et al. (2008)  
Kim (2012)  
Hong and Cha (2013)  
Pei et al. (2014) | I believe that cosmetic online stores are trustworthy |

*Trust* is in this study defined as the extent to which a consumer believes that the merchant will behave in the interest of the consumer when purchasing a product online. The definition was drawn from Hong and Cha (2013). The four items that were used to measure this construct was chosen from previous studies that are stated next to each item for the concept.
**Perceived risk** in this study is defined as consumers’ belief about the potential uncertain negative outcomes from an online transaction. The definition was drawn from Kim et al. (2008). Four items were used to measure this construct and the items were inspired from previous studies that are given next to each item for the concept.

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>ITEMS INSPIRED BY ARTICLES</th>
<th>SURVEY ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kim et al. (2008) Soto-Acosta et al. (2014)</td>
<td>Cosmetic online stores usually ensure that transactional information is protected</td>
</tr>
</tbody>
</table>

**Shopping enjoyment** is in this study defined as the extent to which the activity of using an online site is perceived to be enjoyable. The definition was drawn from Wang et al. (2013). Three items were chosen to measure this construct, which were inspired from previous studies that are given next to each item for the concept.

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>DEFINITION</th>
<th>ITEMS INSPIRED BY ARTICLES</th>
<th>SURVEY ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping enjoyment</td>
<td>Shopping enjoyment is the extent to which the activity of using an online site is perceived as enjoyable.</td>
<td>Seock &amp; Bailey (2008) Im and Ha (2011) Wang et al. (2013)</td>
<td>I enjoy shopping cosmetic products online</td>
</tr>
</tbody>
</table>
**Site design quality** is defined in this study, as the perception of the quality of the technical, content and appearance of a website. The definition is drawn from Al-Qeisi et al. (2014), three items were chosen to measure this construct. The items were inspired from previous studies, where the authors are named next to each item in the table above.

![Table](https://example.com/table.png)

<table>
<thead>
<tr>
<th>CONCEPT:</th>
<th>DEFINITION:</th>
<th>ITEMS INSPIRED BY ARTICLES:</th>
<th>SURVEY ITEMS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site design quality</td>
<td>Site design quality is the perception of the technical quality, content quality and the appearance quality on a website.</td>
<td>Cyr (2013)</td>
<td>I perceive the technical quality (i.e. the navigation) on cosmetic online stores’ websites appealing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Al-Qeisi et al. (2014)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wu et al., (2014)</td>
<td>I perceive the content quality (i.e. the information) on cosmetic online stores’ websites appealing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hernandez et al., (2009)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cyr (2013)</td>
<td>I perceive the appearance quality (i.e. the overall graphical look) on cosmetic online stores’ websites appealing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Al-Qeisi et al. (2014)</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3: Operationalization (Own, 2015)**

Existing items were used but if it was necessary, slight wording changes were made to adjust the questions to the context of this study.

### 4.6.3 Questionnaire design

There are two different kinds of questionnaires, with closed questions and with open questions (Bryman & Bell, 2011). The difference between the two of them is that the closed questions are structured, which means that the answer alternatives that the respondents can chose from are decided by the researchers (Bryman & Bell, 2011). In open questions the questions are unstructured, which means that the respondents can answer freely with their own words (Bryman & Bell, 2011). The advantage with closed questions is that the questions can be coded into numbers that can be analysed...
and compared in a computer (Bryman & Bell, 2011). This will increase the possibility for the researcher to compare differences and relationship between variables in a statistical manner (Bryman & Bell, 2011). This study had as a goal to explain the relationship between *trust, perceived risk, shopping enjoyment, site design quality* and *online purchase intention* in cosmetic products. Therefore, closed questions have been used. It is important to explain what the questionnaire is about before the respondents answer the questions.

All these aspects were taken into consideration when the authors created the questionnaire. The authors of this study aimed to make an easy and clean layout so that it would be comfortable for the participants to answer the questionnaire. The questionnaire included an introduction about the purpose of this study, the content of the questionnaire: the stated questions would involve cosmetic products, that it would take about five minutes to answer the questionnaire and that the respondents answers would be treated anonymously and the authors’ e-mail addresses were given if the respondents had any questions regarding the study or the questionnaire. This was done by the authors in order for the respondents to be prepared for the questionnaire’s questions.

The questionnaire started with general questions about the respondents previous experiences with cosmetic online stores. This was done in order to create knowledge regarding the respondents’ usage of cosmetic online stores. The first question was about if the respondent had visited a cosmetic online store before. The next two questions were about how often they visit cosmetic online stores and with what purpose they visit the cosmetic online stores. These two questions were nominal questions which is used to categorize the respondents in different categorise (Christensen et al., 2010).

As previously stated, the questionnaire was designed to gather data that would explain the respondents’ relationship between *trust, perceived risk, shopping enjoyment, site design quality* and *online purchase intention*. There are several aspects that have to be taken into consideration while creating questions for a questionnaire (Bryman & Bell, 2011). The questions should not be too long, and they should not be leading (Bryman & Bell, 2011). Furthermore, it should not be double-barrelled questions (Bryman &
Bell, 2011). The authors of this study aimed to make the questions as easy as possible to answer. A Likert scale was used to answer these questions. The respondents are allowed to think through and answer to what extent they disagree/agree with the stated questions in a Likert scale (Bryman & Bell, 2011). The response options ranged from 1-7 on a Likert scale, where 1 was “strongly disagree” and 7 was “strongly agree”. The reason for why the authors used a Likert scale 1-7 was to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention in cosmetic products. Furthermore, this was done in order to support or not support the created hypotheses. The aim with the questions in the questionnaire was to see and explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention. The quantitative data gathered from a questionnaire with a Likert scale enables and help the possibility to compare the differences and the relationships between the variables (Christensen et al., 2010).

Bryman and Bell (2011) stated that the problem with having questions with “not” or similar nature is that the respondent might misunderstand the question and understand the question in the opposite way. Bryman and Bell (2011) further stated that sometimes it is impossible to avoid negative formulations but should be avoided as much as possible. The questionnaire had one question where it was a negative formulation but the authors chose to keep it that way because it was impossible to create a positive question with the same intended meaning. The question was “I believe that cosmetic online stores would not behave opportunistically (i.e. take advantage of a situation)”. The rest of the questions were all stated in a positive manner in order to avoid misunderstandings and confusions.

In the end of the questionnaire, one stated question asks the respondents to choose an alternative that suits them best: I have the intention to purchase cosmetic products online and I don’t have the intention to purchase cosmetic products online. This question was created in order to control the respondents’ answer regarding their purchase intention. This question was a nominal question used to categorize the respondents based on their online purchase intention.

In the end of the questionnaire, the respondents were asked about their demographics. The first question was about the respondents’ gender: male or female. The second
question was about which age category the respondents belong to. The age categories were divided into 18-30, 31-50, 51 and older. The created questionnaire can be found in Appendix 1.

4.6.4 Questionnaire translation

Translating questions and the information provided in a questionnaire requires care so that the translated questionnaire represents what the researcher intended (Saunders et al., 2009). Saunders et al. (2009) further explains that it is extremely important that the questions have the same meaning in both languages. The questionnaire to be translated is called source questionnaire and the translated questionnaire is called target questionnaire (Saunders et al., 2009). For the ease of both translation and comprehension, it is desirable to have several simple questions instead of one single complex question (Malhotra, 2010). Malhotra and Birks (2003) explained that one technique when translating a questionnaire is called back translation. Back translation is when someone who is fluent in both of the languages should do the translation of the source questionnaire to the target questionnaire (Malhotra & Birks, 2003). Later on someone else should translate the target questionnaire back to the original language (Malhotra & Birks, 2003). Malhotra and Birks (2003) further explained that the researcher should compare the two questionnaires, to ensure that the source questionnaire is identical in its meaning as the translated version. It is important to take into consideration in the translation process that some words cannot be directly translated and have the same intended meaning due to language differences (Malhotra & Birks, 2003).

In this study the source questionnaire was in English and was translated into Swedish by someone who is fluent in both languages. Later on, another person who is also fluent in both languages translated the questionnaire in Swedish (target questionnaire) back to English. The original questionnaire in English was compared to the translated questionnaire in English by the authors in order to ensure that the meanings of the questionnaires are identical. The authors were thorough when checking the translation in order to ensure that the intended meaning was captured – and not only a direct translation. A third person was brought in to check the translation, the authors’ tutor Martin Amsteus, in order to ensure that the translation was properly done. The
questionnaire in English can be found in Appendix 1 and the questionnaire in Swedish can be found in appendix 2.

4.6.5 Distribution
A questionnaire can be distributed online, or by approaching the respondents in person or sending it out via post (Bryman & Bell, 2011). The two latest options are more time consuming and more expensive than sending out the questionnaire online, it is less pricy and more convenient to distribute the questionnaire online (Bryman & Bell, 2011). The questionnaire in this study has been distributed online due to the time and price advantages as well as the convenience and the fact that it is easier to reach a larger amount of respondents in this way.

The questionnaire was distributed from Harmoniq’s website and Facebook page. Harmoniq is a company that sells cosmetic products both in their physical stores and online. Two distribution channels were chosen, they were both chosen because the interest of this study was to explain online purchase intention, which a respondent could have even though he/she does not visit a cosmetic online store. The two chosen distribution channels ensured the authors that the questionnaire was distributed to a wider audience.

4.6.6 Pre-testing
A pre-test is done in order to generate valuable information regarding how the study should be performed in the most proper way (Ghauri & Grönhaug, 2005). Through a pre-test the researchers can get feedback concerning the questions formulation and relevance, thus detect weaknesses and then improve the questions before the real test is conducted (Ghauri & Grönhaug, 2005). Another advantage with pre-testing is that the researchers will gain information regarding the answers on their questions, hence they will get an indication on the outcome will proceed (Ghauri & Grönhaug, 2005).

A pre-test was performed in this study, mainly in order for the researchers to control the questions and how they were formulated. The questionnaire was pre-tested by five individuals. Primarily, Martin Amsteus, Lector at Linnaeus University, the tutor of this study, reviewed the questionnaire since he was considered to have a great knowledge in consumer behaviour. The questionnaire was adjusted after the feedback from Martin Amsteus before another pre-test was conducted in order to obtain
additional information if there were any uncertainties in questionnaire. The questionnaire was later on pre-tested by Setayesh Sattari, Lector at Linnaeus University due to her expertise in the area. After additional feedback and adjustments, three potential respondents were chosen to answer the questionnaire. The three respondents were chosen through *convenience sampling*, because they were people close to the authors that could answer the questionnaire. The reason for this was to ensure that the questions were formulated in a way that anyone can understand. It is important that the questionnaire is not perceived as difficult to answer because it is important to receive as many responses as possible in the real questionnaire. After the last adjustments, the questionnaire was reviewed by Martin Amsteus to make sure that the changes did not contribute to any misunderstandings in the intended formulations. The questionnaire was then considered as ready for distribution.

### 4.7 Sample

When a researcher conducts a primary data collection he/she must define the target population from where the data will be gathered (Christensen et al., 2010). The target population is the collection of characteristics that possess the information wanted by the researcher (Malhotra, 2010). The information could be obtained by taking a census or a sample (Malhotra, 2010). Christensen et al. (2010) explains that a census is when the information is obtained from the whole targeted population, which is both costly and time consuming. A sample is more suitable, where a sample is a subgroup of the targeted population for the study (Malhotra, 2010). In this study, a sample was selected to represent the targeted population because the targeted population size was too large for the authors to take a census.

The data can be gathered from the sample with two techniques, by using nonprobability or probability sampling (Malhotra, 2010). There are two types of samples, the nonprobability sample means that respondents are selected based on their availability to the researcher while in a probability sample the respondents are randomly selected and has en equal chance to represent the targeted population (Christensen et al., 2010; Malhotra, 2010). In this study, the nonprobability sample was used to select respondents to represent the population. The questionnaire was shared on a cosmetic store’s website and on their Facebook page. The questionnaire was available for anyone who wanted to participate but they had to visit the website.
or have liked their Facebook page, therefore it could be recognized that the convenience sampling was used because the units were available to participate in the study (Malhotra & Birks, 2003).

4.7.1 Sample frame
The sample frame should represent the elements of the target population (Malhotra & Birks, 2003). The sampling frame should be as complete, accurate and up to date as possible (Saunders et al., 2009). Saunders et al. (2009) further explains that if the sampling frame is incomplete or inaccurate, the sample could be seen as not representative of the population.

For the purpose of this study, the sample frame that is chosen is based on the objective of the study (Saunders et al., 2009). The study’s purpose is to explain the relationship between the independent variables trust, perceived risk, shopping enjoyment and site design and the dependent variable online purchase intention within the cosmetic industry. The sample frame was the cosmetic store that distributed the questionnaire, their target group. The sample frame includes both male and female, from the age of 18 years old. The reason for why the age of 18 years was chosen is due to the fact that 18 years is the required age when purchasing online. The authors thought it was an important criterion, since it is more representable of the targeted population.

The respondents in the sample were selected from the two distribution channels, the cosmetic store’s website and on their Facebook page because of their representative of the target population. Aaker et al. (2010) stated that the risk of sampling bias decreases by using different distribution channels.

4.7.2 Sample size
How large a sample size should be is has no clear answer and is dependent on several aspects such as time and money (Bryman & Bell, 2011). According to VanVoorhis and Morgan (2007) a suitable sample size for when the research purpose involves the relationship between variables is 50 responses.

The questionnaire was available both for those who visited the cosmetic store’s website and for those who have “liked” their Facebook page. 10 000 people have
liked the Facebook page. It is impossible for the authors to answer how many individuals were reached through this channel. The website has approximately 1200 unique visitors per day. The authors speculated on the fact that the questionnaire might not been seen by every visitor on the website because it did not pop up on the screen, it was placed under the website’s category “Harmoniq tipsar”, on the front page but the visitors had to scroll down the page a bit in order to see the questionnaire. In total, the authors speculated that the questionnaire might have reached at least 1200 individuals.

252 individuals answered the questionnaire, which is above the 50 responses that VanVoorhis and Morgan (2007) stated as reasonable. That makes the response rate at 21%. Bryman and Bell (2011) discussed response rates and stated that articles that have been published in the most highly regarded journals in the field have had response rates at 18-21%. Bryman and Bell (2011) further stated that response rates are important but more with random selected samples and is not as significant in non-probability convenience sample. The authors of this study are therefore pleased with the questionnaire’s numbers of respondents.

4.8 Data analysis method
In this study the gathered data from the questionnaire is analysed in the data program SPSS. The data analysis method involves several steps, which are in this study: coding, entering the data, data interpretation, descriptive statistics, reliability test, multiple regression requirements, multiple regression analysis and hypotheses testing.

4.8.1 Coding
In order to make it possible to measure and compare variables it is important to code the answers with numbers (Christensen et al., 2010). When the empirical material was collected from the questionnaire, the answers were coded with numbers so that they could be transferred in to and analysed in the computer program SPSS. While performing a quantitative study it is important to code the answers so that the mean, median and mode can be calculated. The questions that were expressed in a Likert scale was given the same number as the respondents answered with. For example, if the respondent answered strongly agree, which was number 7 in the questionnaire, the answer was also coded as number 7 in SPSS. The questions that were associated with
the nominal scale in the questionnaire were given new codes so that they could be transferred into SPSS. When asking the question which of the following alternatives suits you best, the first alternative (I have the intention to purchase cosmetic products online), was coded as 1. While the second alternative (I don’t have the intention to purchase cosmetic products online), was coded as 2. The question regarding gender was coded with male as number 1 and female as number 2. The last question regarding age was coded as following, 18-30 as number 1, 31-50 as number 2 and 50+ as number 3.

Two items for the concept perceived risk answers were “reverse-coded” which means that the authors recoded the answers, 1 was recoded to 7, 2 was recoded to 6, 3 was recoded to 5 and so on. This was done because these two questions were worded in the opposite way than the other two items and therefore the answers were recoded in order for the items to correlate (Hair et al., 2011). The two items that were recoded was “I am concerned about the privacy about my personal information during a transaction with cosmetic online stores” and “I am concerned that cosmetic online stores will collect too much information about me”.

4.8.2 Entering data
After all the data was coded it was entered into the data program SPSS. No editing was needed because all the respondents answered all the stated questions. The main reason for this was that all the questions in the questionnaire were mandatory and therefore the questionnaire could not be sent in without being completed.

4.8.3 Data interpretation and descriptive statistics
Data interpretation and descriptive statistics is done in order to make the process of analysing the data easier. In this step depending on which one that suits the question best, mean, median and mode is calculated. The mean is sensitive towards extreme values (Bryman & Bell, 2010). Therefore, on the question regarding age, only the distribution of age was investigated and the mean was not calculated. The distribution, mean and median can be entered into tables, diagram, graphs or circle diagrams (Bryman & Bell, 2010). In order to clarify the respondents’ answers on each statement regarding the different factors, trust, perceived risk, shopping enjoyment and site design quality, online purchase intention, the data was divided into five different tables. The respondents’ answers on each factor were added together and
then the mean, median and mode were calculated. Due to this, the similarities and
differences could be detected. To see how the typical answers varied from the mean
the standard deviation was calculated.

**4.8.4 Reliability test**
A reliability test is used to test if different statements about a certain variable are
investigating that specific variable, this can be done by the statistical tool Cronbach’s
alpha that is used to measure the internal reliability (Bryman & Bell, 2010). Cronbach’s alpha varies from 0 to 1, and a value of 0.6 or less usually indicates
unacceptable internal consistency reliability (Malhotra, 2010). Therefore all the
variables in this study with a value over 0.6 were considered as reliable, which they
were.

**4.8.5 Multiple regression analysis**
The general purpose with a multiple regression analysis is to study the relationship
between several independent variables and one dependent variable. Furthermore, a
multiple regression can also establish the influence each of the independent variables
has on the dependent variable (Hair et al., 2011). When preforming a multiple
regression analysis, there are some requirements that need to be fulfilled, hence the
data that is going to be analysed should be controlled in order to decide if it is
appropriate to conduct a multiple regression analysis or not (Hair et al., 2011).

This is done in several steps. First of all, there should be independence of residuals,
which refers to that the occurrence of one event does not change the probability of
another (Freund et al., 2006). By checking the Durbin-Watson statistic it can be
determined whether there is a correlation between the observations or not (Freund et
al., 2006). The Durbin-Watson statistic ranges from 0 up to 4, where 0 indicates a
positive correlation and 4 indicates a negative correlation, thus the value should not
exceed 2 (Freund et al., 2006). The second step is to control if there is a linear
relationship between each of the independent variables and the dependent variable,
which can be checked by creating scatterplots and partial regression plots (Freund et
al., 2006). A scatter plot visually shows the assessment of the relationship between an
independent and a dependent variable (Freund et al., 2006). Furthermore, the
collected data needs to show homoscedasticity, which refers to having data values that
are spread out to the same extent (Freund et al., 2006). By plotting the studentized
residuals against the unstandardized predicted values the homoscedasticity can be controlled (Schützenmeister et al., 2012). When it is homoscedasticity the values vary randomly around zero and the spread should be similar throughout the plot (Schützenmeister et al., 2012). Additionally, the data should not show any multicollinearity, which occurs when you have two or more variables that highly correlate with each other (Hair et al., 2011). The multicollinearity can be detected by checking the tolerance and VIF values (Hair et al., 2011). Tolerance measures the influence of one independent variable on all the other independent variables and VIF measures the level of multicollinearity within the set of independent variables (O’Brien, 2007). Which VIF and tolerance values that are required vary from different studies, although the commonly used requirements are that: the VIF value should be below 10 and the tolerance value should be above 0.1 (O’Brien, 2007). Moreover, there should be no significant outliers or no highly influential points, this refers to observations in the data that are in some way unusual and therefore have a negative effect on the regression equation (Freund et al., 2006). This can change the output as well as the statistical significance, so in order to detect these kinds of outliers a casewise diagnostics should be made, which list all the outliers (Freund et al., 2006). Finally, the data should be approximately normally distributed, which can be controlled by using a histogram and a normal Q-Q plot (Freund et al., 2006).

When these requirements are fulfilled, the gathered data can be analysed in a multiple regression model, see Appendix 3 for how the requirements were fulfilled. The Model summary table presents the R, R Square and adjusted R Square. The R column represents the value of the multiple correlation coefficients, which measures the prediction of the dependent variable (Freund et al., 2006). The R Square represents the coefficient of determination, which measures the proportion of variance in the dependent variable that can be explained by the independent variables (Freund et al., 2006). The adjusted R Square also indicates to what extend the dependent variable can be explained by the independent variables, but adjust the number in terms of a model (Freund et al., 2006).

ANOVA is used to detect the statistical variances between the means of two or more groups (Freund et al., 2006). The F-ratio in the ANOVA table tests whether the regression model is a good fit for the data and it shows if the independent variables
4.8.6 Hypotheses testing

The hypotheses testing process is the process in which the conclusions are drawn in order to see if a specific relation between different variables is supported (Nolan & Heinzen, 2008). In this study the hypotheses were tested in a multiple regression analysis. A multiple regression model is used when there are several independent variables, and it tests how one of the independent variable affects the dependent variable and also the influence each of the independent variables has on the dependent variable (Hair et al., 2011). The model tested how trust, perceived risk, shopping enjoyment and site design quality relate to online purchase intention, and also which of the independent variables that has the greatest relationship with the dependent variable. By using this model the authors could discover how much each independent relates to the dependent variable. The multiple regression analysis was also used to analyse differences regarding age and gender in order to further investigate the hypotheses.

The Beta value found in the standardized coefficient column, signifies how much the dependent variable varies in relation to an independent variable, when all other independent variables are held constant (Freund et al., 2006). In the Sig column it can be detected whether the independent variables are statistically significant or not (Freund et al., 2006). It is up to the researchers to decide which specific level of significance that is required in their study (Christensen et al., 2010). In scientific studies the p-value generally is 0.05, which means that the level of significance is 95% (Christensen et al., 2010). Therefore, the required level of significance for this study was decided to 95%. In this study the significance level is accepted at a level of 0.05.

4.9 Research quality

In order for a study to reach a high quality validity and reliability needs to be taken into consideration (Bryman & Bell, 2011). Validity is the process of measuring if a construct actually is measuring what it intends to measure (Bryman & Bell, 2011).
There are several ways of determining the validity of a study, the factors that generally are used in this procedure are, content validity, construct validity and criterion validity (Bryman & Bell, 2011). Reliability deals with if a study is using reliable variables and if the study can be performed numerous times and still come to the same conclusion (Bryman & Bell, 2011).

4.9.1 Content validity
Content validity is reached when all the aspects that were intended to be measured actually are measured (Bryman & Bell, 2011). The content validity is measured before the survey starts since the aim with this process is to make sure that the constructs are representative for what it is supposed to measure (Bryman & Bell, 2011). It is also an important process to go through in order to see if the questions in the survey are easy for the participants to understand (Bryman & Bell, 2011). The questions are supposed to reflect and cover the content that are being investigated, this can be controlled by asking people and experts to go through the survey and give some feedback, hence the researchers get the opportunity to improve those parts that needs to be developed (Bryman & Bell, 2011). In order for this study to reach content validity the researchers asked students within the same research area and a tutor to read it through and give feedback on the operationalization and the questionnaire. With the support from the feedback, the survey was changed and improved. This was done so that all the aspects that was required in order to measure the constructs that was supposed to be measured was taken into consideration, hence so the study reached the highest content validity possible.

4.9.2 Construct validity
Construct validity is determined by how good the survey is measuring the theoretical constructs that the study is supposed to measure (Bryman & Bell, 2011). The researchers should create hypotheses with the theoretical information as a foundation (Bryman & Bell, 2011). It is necessary that there is a connection between the theories and the created questionnaire, hence a detailed operationalization is required in while doing a study with a deductive approach (Bryman & Bell, 2011). In this study the questions in the questionnaire was carefully created with a theoretical foundation. In order for the constructs to be valid a convergent validity should be established, this means that the constructs in the study should be similar to previous studies. If there is a clear and established relationship between trust, perceived risk, shopping enjoyment,
site design quality and online purchase intention, a convergent validity can be settled since the independent variable has been proven to have a correlation with the dependent variable.

### 4.9.3 Criterion validity

Criterion validity is a type of validity that examines if the measurement scale performs as expected and correlates with the other selected variables that are identified as meaningful criteria (Malhotra & Birks, 2003; Hair et al., 2011). For example, in this study theory suggests that when trust is established between consumers and e-commerce businesses, it increases the online purchase intention among consumers. Thus, correlation between trust and online purchase intention should be significant and positive. If this is so, then the authors of this study have established criterion validity for the variable.

There are two types of criterion validity, which are based on the time (Malhotra, 2010). Concurrent validity is established when the variables are measured at the same time (Aaker et al., 2011). All the variables in this study were measured at the same time.

### 4.9.4 Reliability

Reliability refers to the consistency of a measure of a concept (Bryman & Bell, 2011). There are two factors that needs to be evaluated in order for a study to accomplish reliability, external and internal reliability (Bryman & Bell, 2011). External reliability deals with whether a research could be performed a second time and if the results and conclusion would be the same, this aspect will evaluate if the research has a high degree of stability, thus it is trustworthy in the long term (Bryman & Bell, 2011). Due to the lack of time the questionnaire in this research did not have the possibility to be tested during a long period of time, hence the external reliability could not be confirmed from that aspect. Although, in order to increase the external reliability, the researchers has carefully described the choice of method and the approach of the study so that outside researchers will be able to understand and replicate the study.

Internal reliability deals with whether or not the respondents’ scores on the constructs are coherent (Bryman & Bell, 2011). If a respondent has a high score on one question he should have a high score on the other questions on the same concept (Bryman &
Bell, 2011). Cronbach’s alpha is a tool that can be used to examine the internal reliability of a study (Bryman & Bell, 2011). The results should be over 0.6 to be considered reliable (Malhotra, 2010) and when using Cronbach’s alpha there should be at least three questions on each construct in the questionnaire (Hair et al., 2011).

This study used the Cronbach’s alpha to examine the internal reliability and the researchers made at least three questions on each construct in the questionnaire, regarding trust, perceived risk, shopping enjoyment, site design quality and online purchase intention.

If open-ended questions are used, there is a risk that the researchers interpret the answers in a subjective manner, which will affect the internal reliability (Bryman & Bell, 2011). Therefore the researchers of this study decided to have only closed questions in the questionnaire, to exclude subjective interpretation and to make the study more reliable.

4.10 Ethical issues
While performing a research there are some ethical principles that needs to be taken into consideration (Bryman & Bell, 2011). These principles can be divided into four main areas. The first one is harm to participants, which could for example be physical harm or harm to participants’ self-esteem (Bryman & Bell, 2011). The second principle is lack of informed consent, which refers to the fact that participants should be provided with as much information as needed to make the decision if they want to participate in the study or not (Bryman & Bell, 2011). The third principle is an invasion of privacy, which refers to the degree to which the participants’ privacy can be disregarded (Bryman & Bell, 2011). The forth ethical principle is whether deception is involved, deception occurs when the researchers present their research as something other than what it is (Bryman & Bell, 2011).

In this quantitative study, the data gathering was conducted through a questionnaire online, therefore, the authors were not in direct contact with the respondents. Because of this, the respondents’ promised anonymity from the authors was obtained. In order to participate in this questionnaire, the respondents had to consciously choose to partake in the questionnaire, which has enabled the authors to disregard the ethical
aspects regarding whether the participants are aware if they are participating in a study. The respondents have in this case been aware and the authors have explained as much as possible about the questionnaire in order to make it easy for the respondents to answer it. According to Bryman and Bell (2011) the authors have no right to intrude the respondents’ privacy or disregard human rights, no matter what type of study that is conducted. For this study, the authors consider that the respondents have agreed to share their information regarding their online purchase intention. Thus, it is difficult for the authors to know what is considered to be private for every individual. The authors can assure that the respondents that participated in this study that their privacy has been respected and that their shared information will not be used in any other purpose than this specific study.
4.11 Summary of the study’s method

<table>
<thead>
<tr>
<th>The nature of the research</th>
<th>Inductive</th>
<th>Deductive</th>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
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<td>Descriptive</td>
<td>Exploratory</td>
<td></td>
</tr>
<tr>
<td>Data sources</td>
<td>Primary sources</td>
<td>Secondary sources</td>
<td></td>
<td></td>
</tr>
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<td>Research strategy</td>
<td>Experiments</td>
<td>Survey</td>
<td>Archival Analysis</td>
<td>History</td>
</tr>
<tr>
<td>Data collection method</td>
<td>Structured interview</td>
<td>Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collection technique</td>
<td>Operationalization</td>
<td>Questionnaire design</td>
<td>Questionnaire translation</td>
<td>Pre-testing</td>
</tr>
<tr>
<td>Sample</td>
<td>Sample frame</td>
<td>Sample selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data analysis method</td>
<td>Coding</td>
<td>Entering data</td>
<td>Descriptive statistics</td>
<td>Reliability test</td>
</tr>
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<td>Research quality</td>
<td>Validity</td>
<td>Reliability</td>
<td>Ethical issues</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4: Summary of the study’s method (Own, 2015).
5. Results

In this chapter the results of this study are presented, the questionnaire’s answers have been analyzed in SPSS and are presented below.

5.1 Descriptive data

In this subchapter, the descriptive data about the respondents participating in this study is presented. The respondents in this study were chosen based on one criterion, which was that they had to be over 18 years old to participate in the study.

![Age](image1.png)

Figure 5: Age (Own, 2015).

![Gender](image2.png)

Figure 6: Gender (Own, 2015).
The age distribution and the gender distribution among the respondents in this study are presented in the pie charts in figure 5 and figure 6. In this study, a total of 252 respondents participated in the questionnaire, 77% of these 252 were women and 23% were men. 76% of the respondents were in the age 18-30 years old, 18% were 31-50 years and 6% of the respondents were 51 years or older.

**Figure 7:** Visitation frequency (Own, 2015).

**In what purpose do you visit cosmetic online stores?**

**Figure 8:** Purpose of visit (Own, 2015).
In the charts on the previous page, the purpose and the frequency of visiting cosmetic online stores among the respondents are presented. In figure 7 on the previous page, how often the respondents visit cosmetic online stores are presented. 4% of the respondents answered that they quite often visit cosmetic online stores, 15% of the respondents answered usually, 10% answered frequently, 14% answered sometimes, 23% answered occasionally, 21% answered rarely and 13% answered that they never visit cosmetic online stores. In figure 8, on the previous page, the purpose of the respondents’ visits of cosmetic online stores is presented. 11% of the respondents visit cosmetic online stores when they browse online with no special intention, 11% of the respondents’ purpose was to gain information about cosmetic products, 26% of the respondents visit cosmetic online stores to purchase cosmetic products, 16% of the respondents answered that they don’t visit cosmetic online stores. There were respondents who visited cosmetic online stores for several purposes, 7% claimed that they both were browsing and gaining information about cosmetic products when visiting cosmetic online stores. 7% of the respondents answered that their purposes were both browsing online with no special intention and purchasing cosmetic products, 13,5% answered that their purposes were both gaining information about cosmetic products and to purchase cosmetic products. 9% answered that they visit cosmetic online stores when they browse with no special intention, when they want to gain information about cosmetic products and to purchase cosmetic products.

5.1.1 Measures of central tendency
In the tables below the answers that the respondents in average had when answering the questions regarding: trust, perceived risk, shopping enjoyment, site design quality and online purchase intention in cosmetic online stores are presented. The values are based on the 252 respondents’ answers and the tables present mean, median and mode for each item. The results are presented from a scale of 1= strongly disagree to 7= strongly agree.

<table>
<thead>
<tr>
<th>Trust</th>
<th>Item 7</th>
<th>Item 8</th>
<th>Item 9</th>
<th>Item 10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3,71</td>
<td>4,45</td>
<td>4,05</td>
<td>4,52</td>
<td>4,18</td>
</tr>
<tr>
<td>Median</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
</tr>
<tr>
<td>Mode</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
<td>4,00</td>
</tr>
</tbody>
</table>

Figure 9: Trust (Own, 2015).
In figure 9 on the previous page, the table shows that the respondents in average trust cosmetic online stores at 4,18, which is in the middle of the scale and the median and the mode was a 4 at a maximum of 7.

<table>
<thead>
<tr>
<th>Perceived risk</th>
<th>Item 11</th>
<th>Item 12</th>
<th>Item 13</th>
<th>Item 14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5,48</td>
<td>4,75</td>
<td>5,59</td>
<td>4,63</td>
<td>5,11</td>
</tr>
<tr>
<td>Median</td>
<td>6,00</td>
<td>5,00</td>
<td>6,00</td>
<td>5,00</td>
<td>5,5</td>
</tr>
<tr>
<td>Mode</td>
<td>7,00</td>
<td>6,00</td>
<td>7,00</td>
<td>4,00</td>
<td>5,5</td>
</tr>
</tbody>
</table>

Figure 10: Perceived risk (Own, 2015).

The respondents answered on an average that the perceived risk is low, where 5,11 is the mean, as presented in the table above in figure 10. The middle of the scale was 4 and the variable was measured on a seven-point scale where the respondents that perceive a high level of risk answered 1-3. The median was at 5,5 and the mode was 5,5 at a maximum of 7.

<table>
<thead>
<tr>
<th>Shopping enjoyment</th>
<th>Item 15</th>
<th>Item 16</th>
<th>Item 17</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3,66</td>
<td>3,08</td>
<td>3,41</td>
<td>3,38</td>
</tr>
<tr>
<td>Median</td>
<td>4,00</td>
<td>3,00</td>
<td>3,00</td>
<td>3,00</td>
</tr>
<tr>
<td>Mode</td>
<td>4,00</td>
<td>1,00</td>
<td>1,00</td>
<td>4,00</td>
</tr>
</tbody>
</table>

Figure 11: Shopping enjoyment (Own, 2015).

As presented in the table in figure 11, the respondents enjoy shopping for cosmetic products on an average of 3,38, which is below 4 that is the middle of the scale. This means that the respondents answered on the “disagree side” of the scale in regards to shopping enjoyment for cosmetic products. The median was 3 and the mode was 4 at a maximum of 7.
In figure 12, the table presents that the respondents on an average answered that the *site design quality* is almost a 5, which indicates that the quality of the site design is on an average above the middle of the scale. The median was a 5 and the mode was a 7 at a maximum of 7.

In the table above (figure 13) the values are presented that the respondents in average have answered concerning their *online purchase intention* in cosmetic products. The results show that the respondent in average has a purchase intention where the mean was 4, the median was at 4 too and the mode at 7 of a maximum at 7.

The table above (figure 14) presents the total mean and the standard deviation for each variable: *trust, perceived risk, shopping enjoyment, site design quality* and *online purchase intention*. The standard deviation presents the level of agreement among the
respondents in their answers of the questions for each variable. For the variable trust the answers had on an average a deviation of 1,46, perceived risk 1,16, shopping enjoyment 1,71, site design quality 1,72 and for the purchase intention 1,93

5.2 Reliability

<table>
<thead>
<tr>
<th>Variables</th>
<th>Trust</th>
<th>Perceived risk</th>
<th>Shopping enjoyment</th>
<th>Site design quality</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
<td>0,893</td>
<td>0,610</td>
<td>0,873</td>
<td>0,907</td>
<td>0,906</td>
</tr>
<tr>
<td>Number of items</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 15: Internal reliability; Cronbach’s alpha (Own, 2015).

A reliability test was conducted to see if the items in the questionnaire had been rightfully operationalized. A reliability test is useful to assess when the interest is to see if the items measure the same theoretical area/definition. A variable’s Cronbach’s alpha is in this study considered as acceptable at 0,6 (Hair et al., 2011; Malhotra, 2010). The table above (figure 15) presents the number of items that were used to measure each variable and the alphas for each variable. All the variables had a Cronbach’s alpha over 0,6, which demonstrates that the variables are reliable. All of the theoretical areas are studied with at least 3 items, which is considered a minimum to measure an item.

5.3 Multicollinearity

<table>
<thead>
<tr>
<th></th>
<th>Trust</th>
<th>Perceived risk</th>
<th>Shopping enjoyment</th>
<th>Site design quality</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>1,000</td>
<td>0,548</td>
<td>0,495</td>
<td>0,457</td>
<td>0,595</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0,548</td>
<td>1,000</td>
<td>0,331</td>
<td>0,379</td>
<td>0,407</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0,495</td>
<td>0,331</td>
<td>1,000</td>
<td>0,568</td>
<td>0,703</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0,457</td>
<td>0,379</td>
<td>0,568</td>
<td>1,000</td>
<td>0,528</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0,595</td>
<td>0,407</td>
<td>0,703</td>
<td>0,528</td>
<td>1,000</td>
</tr>
<tr>
<td>Sig.(1-tailed):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>.</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0,000</td>
<td>.</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0,000</td>
<td>0,000</td>
<td>.</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
<td>.</td>
<td>0,000</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
<td>.</td>
</tr>
</tbody>
</table>

Figure 16: Multicollinearity (Own, 2015)

Multicollinearity in multiple regression analysis refers to the correlation among the independent variables. The independent variables should not have a stronger correlation than 0,80 (Hair et al., 2011), which none of the independent variables
have. The p-value is found in Sig. (1-tailed) in the table above and is 0,000 for each variable, which indicates significance over 95%.

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity statistics:</th>
<th>Collinearity statistics:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>Trust</td>
<td>0,575</td>
<td>1,739</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0,679</td>
<td>1,474</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0,607</td>
<td>1,648</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0,621</td>
<td>1,610</td>
</tr>
</tbody>
</table>

Figure 17: Collinearity statistics (Own, 2015).

There are tests that are more precise to determine if the multicollinearity is high enough to cause problems, the tests are tolerance and VIF tests, that are presented in the table above in figure 17. The tolerance for each independent variable is above 0,1, which indicates that the multicollinearity is not a problem. The VIF for each independent variable is below 10, which indicates that it is good. The multicollinearity is not a problem in this study.

5.4 Multiple regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4</td>
<td>87,008</td>
<td>0,000</td>
</tr>
<tr>
<td>Residual</td>
<td>247</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 18: ANOVA (Own, 2015)

The F-ratio test whether regression model is a good fit for the data, the table shows that the independent variables, trust, perceived risk, shopping enjoyment and site design quality, statistically significantly predict the dependent variable online purchase intention. F(4, 247) = 87,008, p< 0,05, which means that the regression model is a good fit of the data and moreover, statistically significant.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0,765</td>
<td>0,585</td>
<td>0,578</td>
<td>1,901</td>
</tr>
</tbody>
</table>

Figure 19: The multiple coefficient determination (Own, 2015)

R, the multiple correlation coefficient 0,765 indicates a good level of prediction. Adjusted R² implies that the independent variables: trust, perceived risk, shopping enjoyment and site design quality explain 57,8% of the variation of the dependent
variable, *online purchase intention*. Durbin-Watson, a test of independence of residuals should be close to 2 and that means that there is independence of errors, which it is: 1.901. The table above in figure 19 presents R, Adjusted $R^2$ and Durbin-Watson.

### 5.5 Hypotheses testing

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.253</td>
<td>0.371</td>
<td>-0.681</td>
<td>0.497</td>
</tr>
<tr>
<td>Trust</td>
<td>0.364</td>
<td>0.071</td>
<td>0.275</td>
<td>5.086</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0.092</td>
<td>0.083</td>
<td>0.055</td>
<td>1.105</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0.555</td>
<td>0.060</td>
<td>0.490</td>
<td>9.305</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.117</td>
<td>0.059</td>
<td>0.104</td>
<td>1.991</td>
</tr>
</tbody>
</table>

Figure 20: Coefficients (Own, 2015)

The beta coefficients reveals which of the independent variables contribute the most to explaining the relationship between the dependent variable *online purchase intention* and the independent variables: *trust, perceived risk, shopping enjoyment* and *site design quality*. In this study, *shopping enjoyment* contributes the most to explain the relationship with *online purchase intention*, second comes *trust* and thirdly, *site design quality*.

#### 5.5.1 Hypothesis 1

The table in figure 20 in the subchapter 5.5, presents that when *trust* increases with 1, the *online purchase intention* increases with 0.275. The significance is presented in the last column, the significance for *trust* is at 0.000, which is below the significance in this study. The significance level is accepted at a level of 0.05, which means that hypothesis 1 is supported. *Trust* is positively related to *online purchase intention*.

#### 5.5.2 Hypothesis 2

The table in figure 20 presents that when *perceived risk* increases with 1, the *online purchase intention* increases with 0.055. Although, the significance for the independent variable perceived risk is at 0.270, which means that the significance
level is above what is accepted. That means that hypothesis 2 is not supported. Perceived risk is not negatively related to online purchase intention.

5.5.3 Hypothesis 3
When shopping enjoyment increases with 1, the online purchase intention increases with 0,490, which is presented in the table in figure 20. The significance for shopping enjoyment is at 0,000, which is below the significance level and considered as accepted. The third hypothesis is supported. Shopping enjoyment is related to online purchase intention.

5.5.4 Hypothesis 4
As presented in the coefficient table in figure 20, when the site design quality increases with 1, the online purchase intention increases with 0,104. The significance level is accepted at 0,05 and the significance for site design quality is just below at 0,048. Hypothesis 4 is supported: site design quality is positively related to online purchase intention.

5.5.5 Summary of hypotheses testing

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Hypothesis 2</th>
<th>Hypothesis 3</th>
<th>Hypothesis 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>--</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>

Figure 21: Summary of hypothesis testing (Own, 2015)

In the table above, a summary of the hypotheses testing is presented, if the null hypothesis is not supported, the alternative hypothesis is marked with V, if the null hypothesis is supported, the alternative hypothesis it is marked with --.

5.6 Remaining descriptive data

In order to be able to determine how the results are in different groups, the multiple regression analysis was done with the respondents analyzed in terms of age and gender.
### 5.6.1 Differences between the age groups

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30 years</td>
<td>0.781</td>
<td>0.609</td>
<td>0.601</td>
<td>1.20098</td>
<td>1.929</td>
</tr>
<tr>
<td>31-50 years</td>
<td>0.794</td>
<td>0.631</td>
<td>0.594</td>
<td>1.34778</td>
<td>1.873</td>
</tr>
<tr>
<td>51+ years</td>
<td>0.772</td>
<td>0.595</td>
<td>0.415</td>
<td>1.40661</td>
<td>2.757</td>
</tr>
</tbody>
</table>

Figure 22: The multiple coefficient determination between the age groups

The table above in figure 22, presents how the independent variables: trust, perceived risk, shopping enjoyment and site design quality explain the dependent variable online purchase intention between the different age groups. Under Adjusted R Square in the table we can see that Adjusted R square shows that 60,1% of the online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality in the age group 18-30 years. Among the age group 31-50 years, the Adjusted R square indicates that 59,4% of their online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality. Among the age group 51+ years, the Adjusted R square indicates that 41,5% of their online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18-30 years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.272</td>
<td>0.429</td>
<td>-0.634</td>
<td>0.527</td>
</tr>
<tr>
<td>Trust</td>
<td>0.292</td>
<td>0.078</td>
<td>3.738</td>
<td>0.000</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0.091</td>
<td>0.093</td>
<td>0.987</td>
<td>0.325</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0.615</td>
<td>0.064</td>
<td>9.645</td>
<td>0.000</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.122</td>
<td>0.062</td>
<td>1.965</td>
<td>0.051</td>
</tr>
<tr>
<td><strong>31-50 years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.165</td>
<td>0.805</td>
<td>0.205</td>
<td>0.838</td>
</tr>
<tr>
<td>Trust</td>
<td>0.524</td>
<td>0.177</td>
<td>2.959</td>
<td>0.005</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>-0.173</td>
<td>0.209</td>
<td>-0.825</td>
<td>0.414</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>0.317</td>
<td>0.181</td>
<td>1.747</td>
<td>0.088</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.411</td>
<td>0.193</td>
<td>2.129</td>
<td>0.039</td>
</tr>
<tr>
<td><strong>51+ years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.515</td>
<td>2.223</td>
<td>-0.232</td>
<td>0.822</td>
</tr>
<tr>
<td>Trust</td>
<td>0.743</td>
<td>0.450</td>
<td>1.651</td>
<td>0.133</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0.267</td>
<td>0.560</td>
<td>0.476</td>
<td>0.645</td>
</tr>
<tr>
<td>Shopping enjoyment</td>
<td>-0.158</td>
<td>0.552</td>
<td>-0.286</td>
<td>0.781</td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.311</td>
<td>0.571</td>
<td>0.544</td>
<td>0.599</td>
</tr>
</tbody>
</table>

Figure 23: Coefficients between the age groups (Own, 2015).
The table on the previous page (figure 23) presents the relationship between the independent variables trust, perceived risk, shopping enjoyment, site design quality and the dependent variable online purchase intention and how it varies between the age groups.

When the independent variable trust increases with 1, the online purchase intention increases with 0.223 among the age group 18-30 years. Among the age group 31-50 years the online purchase intention increases with 0.390 when trust increases with 1. For the age group 51+ years, the online purchase intention increases with 0.553 when trust increases with 1. For the age groups 18-30 years and 31-50 years, the significance for trust was 0.000 and 0.005, which is accepted according to the significance level of 0.05 in this study. However, the significance for trust among the age group 51+ years was not accepted, the significance was 0.133 which is above the required level of significance in this study. This implies that hypothesis 1 is supported for the age groups 18-30 years and 31-50 years. Trust is positively related to online purchase intention between these two age groups. Thus, hypothesis 1 is not supported for the age group 51+ years.

When the independent variable perceived risk increases with 1, the dependent variable online purchase intention increases with 0.054 in the age group 18-30 years. The online purchase intention decreases with 0.106 in the age group 31-50 years when the perceived risk increases with 1. In the age group 51+ years, the online purchase intention increases with 0.165 when the perceived risk increases with 1. The significance for the perceived risk is above the accepted level in this study, for all the age groups. This implies that hypothesis 2 is not supported.

When shopping enjoyment increases with 1, the online purchase intention increases with 0.551 in the age group 18-30 years. In the age group 31-50 years, the online purchase intention increases with 0.264 when the shopping enjoyment increases with 1. The online purchase intention decreases with 0.135 when the shopping enjoyment increases with 1 for those in the age group 51+ years. The significance of shopping enjoyment for the age group 18-30 years is 0.000, which is accepted in this study. Hypothesis 3 is supported for the age group 18-30 years, where shopping enjoyment is related to online purchase intention. However, the significance for shopping
enjoyment in the age group 31-50 years is not accepted with a value of 0,088 and also not accepted for the age group 51+ years with a value of 0,781. This indicates that hypothesis 3 is not supported for the ages 31-50 years and 51+ years; shopping enjoyment is not related to online purchase intention between these two age groups.

When site design quality increases with 1, the online purchase intention increases with 0,109 in the age group 18-30 years. The online purchase intention increases with 0,341 for the age group 31-50 years when the site design quality increases with 1. For the age group 51+ years, the online purchase intention increases with 0,250 when the site design quality increases with 1. For the age group 18-30 years, the significance of site design quality was not accepted. The significance for the site design quality was accepted for the age group 31-50 years. The significance was not accepted for the age group 51+ years. The hypothesis was not supported for the age groups 18-30 years and 51+ years. The hypothesis was supported to the age group 31-50 years. This implies that site design quality is positively related to online purchase intention in the ages of 31-50 years.

5.6.2 Differences between the genders

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.808</td>
<td>0.653</td>
<td>0.626</td>
<td>1.32700</td>
<td>1.788</td>
</tr>
<tr>
<td>Female</td>
<td>0.751</td>
<td>0.563</td>
<td>0.554</td>
<td>1.24000</td>
<td>1.845</td>
</tr>
</tbody>
</table>

Figure 24: The multiple coefficient determination between the genders (Own, 2015).

The table above in figure 24, presents how the independent variables: trust, perceived risk, shopping enjoyment and site design quality explain the dependent variable online purchase intention between the genders, male and female. Under Adjusted R Square in the table we can see that Adjusted R square shows that 62,6% of the online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality among males. Among the females, the Adjusted R square indicates that 55,4% of their online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality.
The table above (figure 25) presents the relationship between the independent variables trust, perceived risk, shopping enjoyment, site design quality and the dependent variable online purchase intention and how it varies between the genders.

When the independent variable trust increases with 1, the online purchase intention increases with 0.348 among males and among females the online purchase intention increases with 0.226. In both cases, male and female, the significance is accepted. For male the significance is 0.015 and for females 0.000, both are below the significance level at 0.05 that is required in this study for the hypotheses to be supported. This implies that hypothesis 1 is supported.

When the independent variable perceived risk increases with 1, the online purchase intention increases with 0.117 for the males and among the females the online purchase intention increases with 0.037. Thus, the significance for perceived risk was not accepted; the significance was 0.256 for males and 0.534 for females. These significance numbers are above the required level of significance of 0.05 for this study, this implies that hypothesis 2 is not supported.

When shopping enjoyment increases with 1, the online purchase intention among males increases with 0.393. For females the online purchase intention increases with 0.535 when the shopping enjoyment increases with 1. The significance for both males and females for shopping enjoyment was accepted, for males the significance was

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.028</td>
<td>0.736</td>
<td>-1.397</td>
<td>0.169</td>
</tr>
<tr>
<td>Trust</td>
<td>0.442</td>
<td>0.175</td>
<td>2.519</td>
<td>0.015</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0.195</td>
<td>0.170</td>
<td>1.148</td>
<td>0.256</td>
</tr>
<tr>
<td>Shopping</td>
<td>0.545</td>
<td>0.159</td>
<td>3.432</td>
<td>0.001</td>
</tr>
<tr>
<td>enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.138</td>
<td>0.127</td>
<td>1.087</td>
<td>0.282</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.051</td>
<td>0.438</td>
<td>0.117</td>
<td>0.907</td>
</tr>
<tr>
<td>Trust</td>
<td>0.302</td>
<td>0.083</td>
<td>3.635</td>
<td>0.000</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>0.061</td>
<td>0.098</td>
<td>0.623</td>
<td>0.534</td>
</tr>
<tr>
<td>Shopping</td>
<td>0.591</td>
<td>0.068</td>
<td>8.747</td>
<td>0.000</td>
</tr>
<tr>
<td>enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site design quality</td>
<td>0.104</td>
<td>0.068</td>
<td>1.533</td>
<td>0.127</td>
</tr>
</tbody>
</table>

Figure 25: Coefficients between the genders (Own, 2015).
0,001 and for females 0,000. This means, that hypothesis 3 is supported.

When site design quality increases with 1, the online purchase intention among males increases with 0,122 and for females the online purchase intention increases with 0,090. The significance for site design quality among the males was 0,282, which is not accepted in this study. The significance for site design quality among the females was 0,127, which is also not supported in this study. This implies that the significance level for site design quality was above the required significance level in this study, which means that hypothesis 4 is not supported.

### 5.6.3 Additional results

<table>
<thead>
<tr>
<th></th>
<th>18-30 years</th>
<th>31-50 years</th>
<th>51+ years</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>( \forall )</td>
<td>( \forall )</td>
<td>--</td>
<td>( \forall )</td>
<td>( \forall )</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>( \forall )</td>
<td>--</td>
<td>--</td>
<td>( \forall )</td>
<td>( \forall )</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>--</td>
<td>( \forall )</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Figure 26: Summary of additional results (Own, 2015).

In the table above in figure 26, a summary of the additional results is presented. The table presents, if the null hypothesis is not supported, the alternative hypothesis is marked with \( \forall \), if the null hypothesis is supported, the alternative hypothesis it is marked with --.
6. Discussion

The results of the data that was gathered to answer the hypotheses were presented in the previous chapter. This chapter involves a discussion about the results of this study. The discussion is connected to the purpose of this study and the theory chapter.

6.1 Discussion: online purchase intention

The study’s result presents that the online purchase intention in cosmetic products among the respondents were on an average a 4,18 on a maximum of 7. This implies that the respondents were neutral to a bit positive towards purchasing cosmetic products online. Ones attitude towards a specific behavior could be affected by subjective norms of influential people one has around such as friends and family (Ajzen & Fishbein, 1980). There is a possibility that the respondents’ attitude towards purchasing cosmetic products online have been affected by the people close to them. This is supported by Korzaan (2003) that discussed the fact that ones attitude towards online shopping could affect ones intention to purchase online. This might actually be the case in this study, because the respondents answered in average almost a 5 out of 7 regarding how positive they were towards purchasing cosmetic products online, and this might affect their intention to purchase because according to their answers the respondents answered in average almost a 4 in their intention to purchase cosmetic products online. There is also a possibility that the respondents’ intention to purchase cosmetic products online is neutral because they have not perceived the benefits of shopping online in comparison to physical stores (So et al., 2005). It was revealed that the chosen independent variables in this study, explain 57,8% of the online purchase intention in cosmetic products among the respondents. The remaining 42,2% of the online purchase intention is explained by other independent variables.

6.2 Discussion: hypothesis 1

The study’s result presents that when the trust increases the online purchase intention increase. The result presented that if the trust increase with 1, the online purchase intention increases with 0,275 in theory. The fact that the relationship between the variables existed and that it appears that trust predict online purchase intention was expected in accordance with Kim et al. (2008) that described trust as being positively related to online purchase intention. The result is reliable because the significance has a value of 0,00.
According to Yu-Hui and Barnes (2007) creating trust is complex due to the fact that the transactions are more detached and anonymous online. Despite that creating trust is complex, the result shows that the respondents have a high level of trust. This is according to the fact that the respondents answered the items that measure trust on an average of 4, which indicates that they somewhat do trust cosmetic online stores. The respondents answer that they believe that cosmetic online stores would not behave opportunistically, which indicates that the respondents do not let the anonymous and detached transactions affect their trust towards cosmetic online stores.

The trustworthiness is one of the first things a consumer wants to ensure when visiting a website (Pui-Mun, 2002), which could also be interpreted as having a meaning for trust in this study. The respondents answered positively towards believing that cosmetic online stores are trustworthy. A good reputation can help the trustworthiness of a company and can be built by providing the customers help and support when needed (Kim, 2012). Thus, the respondents were in average neutral towards believing that cosmetic online stores have their best interest in mind. However, the respondents were a bit more positive in average towards believing that the cosmetic online stores keep their promises and commitments. The result in this study indicates that of the independent variables, trust is in the second place of predicting the online purchase intention the most.

6.3 Discussion: hypothesis 2

From the result it could be concluded that perceived risk is not negatively related to online purchase intention, because the significance value was at 0.270, which does not support hypothesis 2. The result was not as expected because previous research claimed that perceived risk is negatively related to online purchase intention (Kim et al., 2008; Salisbury et al., 2001). When perceived risk increases with 1, the online purchase intention increases with 0.055, the direction was not as expected due to the fact that the expected direction was that the higher perceived risk, the lower online purchase intention.

The analysis revealed the respondents answered on an average that their perception of the risk was low; the average for the items that measured the perceived risk was 5.11
where the maximum was 7. The study’s result indicates that the perceived risk does not affect the online purchase intention negatively because the respondents appear to not perceive a level of risk when dealing with cosmetic online stores. Soto-Acosta et al. (2014) stated that if companies include information on their website, the customers would perceive lower levels of risk. However, the respondents answered in average that they were not concerned about the privacy of their personal information during a transaction with cosmetic online stores with close to a 6 of a maximum of 7, which indicates a very low concern. That could be connected to the fact that the respondents answered that cosmetic online stores usually ensures that transactional information is protected with close to a 5, which indicates that the respondents are in agreement with the statement. Lurie (2004) stated that a good structure on the provided information on a website could help convey the intended message. Chen et al. (2009) argued for the amount of information, where too much information could actually lead to a high perception of risk. It appears that the respondents perceive and understand the information that cosmetic online stores provide regarding their transactional information due to their answers in this matter. Also, in average the respondents answered that their concern with cosmetic online stores collecting too much information about them was very low too.

A perception of a high level of security in the transactions will lead to a greater intention to purchase from that e-commerce business (Salisbury et al., 2001). Even though the respondents answered that they perceive a high level of security when dealing with cosmetic online stores, it could not be connected to the fact that it affects the online purchase intention in cosmetic products. Kim et al. (2008) claimed that the information privacy and transaction security are of importance for consumers when dealing with an online store and the perceived risk concerning information privacy and transaction security reduces the purchase intention. The respondents answered that they are not concerned for their information privacy and transaction security. It could be possible that the respondents do not perceive any risks when transacting with cosmetic online stores and therefore it is not predicting their intention to purchase from cosmetic online stores.

It is possible that previous research is right about how to lower the perceived risk, due to the fact that the risk was considered as low according to the respondents. But, that
does not necessarily mean that perceived risk somehow affect the online purchase intention, not when it concerns cosmetic products in this study. However, when the low perceived risk is accomplished it might be taken for granted by the customers and not be considered as something remarkable anymore. It is difficult to assess a relationship when the independent variable perceived risk is perceived as little and the direction is not as expected, and the relationship is not statistically significant.

6.4 Discussion: hypothesis 3
The study’s result validates hypothesis 3, which is: Shopping enjoyment is related to consumers’ online purchase intention. The result is reliable due to the significance that had a value of 0.00. According to Im and Ha (2011) the feeling of enjoyment felt while visiting a website can increase the online purchase intention among consumers by contributing to an enjoyable shopping experience. Choon et al. (2010) does not agree with the previous statement and argues that shopping enjoyment does not positively affect consumers online purchase intention. Due to the noticeable differences in the existing theory regarding how shopping enjoyment is related to online purchase intention the authors of this paper decided to not have any positive or negative direction on the hypothesis, but rather state that there is a relationship between the variables. Consequently, the result showed that there is a positive relationship between shopping enjoyment and online purchase intention. The results validate that when shopping enjoyment increases with 1, the online purchase intention increases with 0.490. Furthermore, the study’s results shows that there is a positive relationship between shopping enjoyment and online purchase intention in the context of cosmetic products.

While doing a more specific analysis of the different questions that were asked in order to measure how shopping enjoyment is related to online purchase intention the answered varied a little. Some of the statement showed a low value while others showed a higher value. This could explain the rather low total mean for the variable shopping enjoyment, which was 3.38. This mean indicates that the respondents in this study neither strongly agree nor strongly disagree that they enjoy shopping for cosmetic products online, although a positive relationship between the variables can be found. The shopping enjoyment can be increased, Seock and Bailey (2008) suggests interactive networking community for the customers that visit the online
store. This might increase the shopping enjoyment for customers while visiting cosmetic online stores. The result in this study indicates that of the independent variables, shopping enjoyment is in the first place of predicting the consumers’ online purchase intention.

6.5 Discussion: hypothesis 4

This study’s result presents that when the site design quality increases, the online purchase intention increase. This validates hypothesis 4, which was: Site design quality is positively related to consumers’ online purchase intention. The result shows that if the site design quality increases with 1, the online purchase intention increases with 0,104 in theory. The result is reliable due to the significance that has a value of 0,048. Kim et al. (2013) stated that the website is the main connection between the company and the consumers and therefore the site design quality is of great importance, hence the result from this study was somewhat expected.

The analysis revealed that the respondents answered somewhere in between on how important they consider the site design quality. The average value for the items that measured the site design quality was 4,82, where the maximum was 7. This indicates that they think site design quality is relatively important. Consumers are influenced of their perception of the quality of a website (Al-Qeisi et al., 2014), thus the site design quality is something customers value while shopping cosmetic products online.

All of the items measuring site design quality had a value close to 5 of a maximum of 7, which shows that the respondents value site design quality. The technical quality i.e. ease of navigation, can according to Cyr (2013) be improved by adding features such as: search bars, filters of product lines, categories and subcategories. The respondents of this study might think that such features on cosmetic online stores is lacking, which could explain why the value on the item measuring the technical quality is lower. The values on the items measuring the content quality and the visual quality were slightly higher than the value on the item measuring the technical quality. According to Cyr (2013) the visual quality includes colors, images and shapes, and could be useful tools to increase the perception of the visual quality on cosmetic online stores. Kincl and Stratch (2012) argue that the content is important within the site design quality in accordance with the findings of this study. The
content quality could be improved by providing relevant, easy to digest and easy accessible information (Thongpapani & Ashraf, 2011). Wu et al. (2014) stated that the website design tends to affect consumers through their attitude towards the business. It was concluded in this study that the respondents’ attitudes were almost a 5 on a scale of maximum 7, which is on the same level as the respondents answer towards site design quality. It is possible that the online purchase intention could be increased by site design quality from its direct relation and also, through ones attitude towards cosmetic online stores, that has been affected by the perception of the website design, it would be interesting for future research to investigate. The result in this study indicates that of the independent variable, site design quality is in the third place of predicting the consumers’ online purchase intention.

6.6 Discussion: remaining descriptive data

The aim of this study was to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention. To explain relationships can be done in several ways, in this study the explaining is done by also dividing the respondents into different groups in order to detect if the null hypotheses are rejected when tested in the divided groups.

6.6.1 Differences between the age groups

It is questionable how representative the results for the different age groups are to a larger population, because a non-probability convenience sample was used to reach many individuals during a short amount of time. The cosmetic store’s Facebook page was one of the distribution channels, which could be the reason for the large portion of young respondents.

The respondents were divided into three age groups: 18-30 years, 31-50 years and 51+ years. The results present that 60,1% of the online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality in the age group 18-30 years. In the age group 31-50 years, 59,4% of their online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality. Among the age group 51+ years, 41,5% of their online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality. The online purchase intention is less explained by trust, perceived risk, shopping
enjoyment and site design quality in the oldest age group 51+ years. This indicates that further research could investigate what other factors explain the online purchase intention in the age group 51+ years in comparison to the 18-30 years and 31-50 years.

From the results of the different age groups, it can be recognized that trust is positively related to online purchase intention among two of the three age groups, 18-30 years and 31-50 years. For these two age groups, the result is considered as reliable. The age group 51+ years did not have significance for trust and the result cannot be considered as statistically significant. According to Mayer et al. (1995) trust is explained as the willingness to be exposed to the activities of another one and through the anticipation that the other one will act in a particular fashion and it is possible that the respondents in the age group 51+ are not willing to be exposed to cosmetic online stores. The reason for why the respondents in the age group 51+ years do not trust cosmetic online stores could be explained by the fact that the transactions are more detached and anonymous online (Yu-Hui & Barnes, 2007). Also, it could be argued that the respondents in the age group 51+ are not familiar enough with transacting online, Gefen & Straub (2004) argued that how familiar one is with what is happening in the online context and why, is connected to their intention to purchase. It could be possible, that the trust is not statistically significantly related to online purchase intention because the age group 51+ have not interacted with cosmetic online stores enough to feel familiar with the detached and anonymous transactions.

When the perceived risk was measured between the age groups, it also revealed that perceived risk was not significant when the respondents were divided into groups. Even though perceived risk is not statistically significantly related to online purchase intention, the direction for the age group 31-50 years was as expected. The online purchase intention decreases with 0.106 when the perceived risk increases with 1 for the age group 31-50 years. This implies that perceived risk is negatively related to online purchase intention for the age group 31-50 years, but not statistically significantly. This result is in accordance with Salisbury et al. (2001) that also indicated that perceived risk is negatively related to online purchase intention. The respondents in this age group perceive a risk when transacting with cosmetic online transactions.
stores, as Kim et al. (2008) stated it is important that information regarding transaction security and information privacy is provided to the consumers. It could be a possible reason that the respondents perceive a risk due to lack of provided information regarding their security and privacy when dealing with cosmetic online stores.

Shopping enjoyment was recognized as being related to online purchase intention in the age group 18-30 years, in accordance with Van der Heijden and Verhagen (2004) study that concluded that there is an indication of shopping enjoyment predicting the online purchase intention. Kim et al. (2007) stated that the perception of an online store is what creates the shopping enjoyment, which could be connected to the fact that it appears that the respondents in the age group 18-30 years has a more positive perception of cosmetic online stores and enjoy shopping for cosmetic products. Im and Ha (2011) concluded the importance of online stores to contribute to enjoyable shopping experiences, this could be the reason for why the age group 31-50 years and 51+ years do not enjoy shopping for cosmetic products, because they have not experienced enjoyable shopping visits when visiting cosmetic stores online. On the other hand, Choon et al. (2010) claimed that shopping enjoyment is not related to online purchase intention which is in accordance for the age groups 31-50 years and 51+years. According to Kim et al. (2007) the perception of shopping enjoyment can be increased by adding features as 3D virtual images and in-depth description, by implementing features of this kind the shopping enjoyment could possibly increase for the age groups 31-50 years and 51+ years. It could be stated that the perception of shopping enjoyment and what shopping enjoyment is varies for the different age groups and would be interesting to further investigate. The significance of shopping enjoyment for the age group 18-30 years was 0.000, which indicates that the result is reliable for individuals in this age.

The site design quality was recognized as significant for the age group 31-50 years. The age groups 18-30 years and 51+ years did not have significance for site design quality. Al-Qeisi et al. (2014) argued for the importance of the website appearance in order to increase the perception of site design quality, it might be considered as appealing for the respondents in the age 31-50 years but not as important for those in the younger age group and the older age group. The results presents that the age group
31-50 years online purchase intention increased the most of the age groups when the site design quality increased with 1. This indicates that the site design quality is considered as more appealing to those in that age group in comparison to the other two age groups. The information content on the website also contributes to the site design quality (Hernandez et al., 2009) and the ease of navigation to easily find what you are searching for is also considered as an important aspect of the site design quality (Cyr, 2013). These aspects that are claimed to important for site design quality are apparently not aspects of the site design that the respondents in the age group 18-30 years and 51+ years perceive as contributing to the quality of the site design. It would be interesting to investigate further in what is considered to increase the perception of quality of a site design for these two age groups.

6.6.2 Differences between the genders
The respondents were divided into two groups of males and females. The results present that 62.6% of the online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality for men meanwhile 55.4% of the online purchase intention is explained by trust, perceived risk, shopping enjoyment and site design quality for women.

The gender distribution was not so even, 77% of the respondents were females and 23% were males. Kim et al. (2008) described that it appears that trust is positively related to online purchase intention, which comport with the results of this study. The results show that trust is positively related to online purchase intention even when the respondents are divided into groups of males and females. The significance for trust for males was 0.015 and for females 0.000, which is accepted.

When the perceived risk was measured between the genders, it also revealed that perceived risk was not significant when the respondents were divided into groups. Wang et al. (2013) stated that the perceived enjoyment influence consumers purchase intentions, which is in accordance with the findings of this study also when the respondents are divided into groups. The significance for shopping enjoyment for both males and females was accepted, for males the significance was 0.001 and for females 0.000, which indicates that the results are reliable. Aladwani (2006) claimed that consumers’ perception of the quality of a website is positively related to the
customers’ online purchase intention, therefore the attractive design and content is of great importance. The result of this study is not in accordance with Aladwani (2006) when the respondents are divided into males and females. The significance of the site design quality was above the required level in this study, both for men and women.
7. Conclusion

The conclusion of this study is presented in this chapter.

The independent variables trust, shopping enjoyment and site design quality are related to the dependent variable online purchase intention. Trust, shopping enjoyment and site design quality is positively related to online purchase intention. This can be validated by the hypotheses that were tested and supported: hypotheses 1, 3 and 4. The independent variable perceived risk is not negatively related to online purchase intention. This can be validated by the hypothesis that was tested and not supported: hypothesis 2. The independent variables are found to explain 57.8% of the online purchase intention. The respondents’ online purchase intention in this study is explained by trust, shopping enjoyment and site design quality.

It appears that shopping enjoyment predicts online purchase intention the most of the independent variables, the result indicates that trust comes second in predicting online purchase intention and site design quality appears to predict online purchase intention the least of the three independent variables that were statistically significant. The level of significance on these independent variables was all below 0.05, hence the result is considered reliable.

When testing the hypotheses through dividing the respondents into different types of groups, it could be detected that hypothesis 1: Trust is positively related to consumers’ online purchase intention, was supported when the respondents were divided into groups of males and females, in the age groups 18-30 years and 31-50 years. The hypothesis was not supported in the group aged 51+ years. Hypothesis 2: Perceived risk is negatively related to consumers’ online purchase intention, was not supported in any of the groups.

When testing the hypotheses by dividing the respondents into groups it was revealed that hypothesis 3: Shopping enjoyment is related to consumers’ online purchase intention, was supported when they were divided into males and females, in the age groups 18-30 years. Although, the hypothesis was not supported in the age groups 31-50 years and 51+ years.
When the hypotheses was tested by dividing the respondents into different groups it was detected that hypothesis 4: *Site design quality is positively related to consumers’ online purchase intention*, was supported by one group: the age group 31-50 years. The hypothesis was not supported when the respondents were divided in genders and the age groups 18-30 years and 51+ years.
8. Implications, limitations and future research

8.1 Theoretical implications

The purpose with this study was to explain the relationship between trust, perceived risk, shopping enjoyment, site design quality and online purchase intention. According to Pavlou (2003) and Crespo et al. (2009) and Hsu et al. (2014) further research is needed about trust and perceived risk in relation to consumers’ online purchase intention. Childers et al. (2001) and Wann-Yih and Ching-Ching (2015) suggest that the consumers’ shopping enjoyment needs further investigation. Furthermore, Yu-Hui and Barnes (2007) and suggests that the site design quality is an important factor that should be further investigated.

This study has contributed with knowledge within the chosen theoretical fields. Trust, shopping enjoyment and site design quality is positively related to consumers online purchase intention in the context of cosmetic products. Morgan and Hunt (1994) stated that trust is an essential factor for company’s success. This statement can be supported by the results from this study, which shows that trust is positively related to consumers’ online purchase intention. More specifically, this proposition appears to be valid in the context of cosmetic products. Flavian and Guinaliu (2006) stated that perceived risk is negatively related to consumers’ online purchase intention, although this could not be confirmed by the results in this study.

Wang et al. (2013) describes shopping enjoyment to be a factor that is positively related to consumers’ online purchase intention in contradiction with Verhoef and Langerak (2001) whom states the opposite, that shopping enjoyment does not positively relate to consumers’ online purchase intention. The contribution from this study shows that shopping enjoyment is positively related to consumers’ online purchase intention in the context of cosmetic products. According to Aladwani (2006) site design quality is an essential factor for companies to take into consideration in order to attract customers. This is supported by this study and additionally it could also be applicable in the context of cosmetic products.

This study implies that in the context of cosmetic products, shopping enjoyment has the strongest relationship with consumers’ online purchase intention. The study also
indicates that trust and site design quality is positively related to consumers’ online purchase intention. Moreover trust appears to have the second strongest relationship with consumers’ online purchase intention while site design quality is on the third place.

The variables were tested together instead of one at the time, multiple regression instead of regression. By doing so, it could clearly be presented how much the chosen independent variables together explain the dependent variable. Based on that it can be stated that there are additional variables that predict the online purchase intention, it would be interesting to investigate in which independent variable could be included in the model and test all the variables together again. By testing all the variables together, a more rich understanding of the online purchase intention is found.

8.2 Practical implications

The study’s practical implications could be useful for companies that have cosmetic online stores or are considering starting to operate in that context. The results reveal what appears to affect consumers’ online purchase intention in cosmetic products. The result revealed that the respondents do not perceive any risks when interacting with cosmetic online stores, which could be because cosmetic online stores usually ensure the visitor that their private information and transaction security is of great priority. Therefore, in order to remain or create a low perceived risk among consumers, it is important to state and ensure that actions are taken towards any set of risks, in order to create a perception that the cosmetic online store offers secure transactions.

The results revealed that the respondents trust cosmetic online stores, besides the age group 51+ years. Companies operating in cosmetic stores online should put in efforts to establish trust with that age group as well. It is important to recognize that it is not easy for everyone to “check” an online store to see if it is trustworthy or not. Therefore in order to establish trust with every age group, offering customer support on the website could both establish and increase trust among all consumers.

The result indicates that shopping enjoyment was according to the respondents the independent variable that predicts their online purchase intention the most when they
were not divided into groups. Creating enjoyable shopping experiences is therefore of importance for cosmetic online stores. There are many online stores offering cosmetic products, it is therefore essential to differentiate from the others, such as by putting efforts in the *shopping enjoyment* for the consumers and it should not be taken for granted because the results indicates its great importance. For companies that want to attract customers in the age groups 31-50 years and 51+ years, should try to increase their *shopping enjoyment* by for instance offer more in depth descriptions and 3D virtual.

The result indicates that the *site design quality* predicts the *online purchase intention* the least out of the three independent variables that do have a relationship to the *online purchase intention*. The relationship does exist and the respondents’ answers regarding the *site design quality* may have been somewhat neutral to a little positive. Companies should put their efforts in the content quality and the overall graphical look since the respondents claimed that those two aspects of the *site design quality* was most important.

### 8.3 Limitations in the study

By distributing the questionnaire on a cosmetic online store’s website and Facebook page the questionnaire only reached individuals who were visiting either the website or the Facebook page, which might have affected the sample. Hence, there could be a risk that the sample is not representable for the whole population. The fact that the majority of the respondents were in the age group 18-30 could be due to the choice of distribution channels, although the different age group were also discussed and analysed separately in order to detect patterns and gain a deeper understanding regarding their answers. Moreover, it could be of interest for companies to know which factors that affect customers in this age group and their online purchasing behaviour, since this group probably are a target group for many companies.

The distribution channels that the authors used excluded the possibility to confirm a response rate for the study, since the authors do not know how many that has seen the questionnaire nor on which distribution channel the respondents saw the questionnaire. In order to ensure a response rate another choice of distribution channels would have been required.
In this study the respondents consisted of both people who had purchased cosmetic products online before and people who had not. The result might have turned out differently if the people who have never purchased cosmetic products online would have been excluded and only the people who actually have previous experience within the area would have been investigated. Another limitations regarding this study is whether the results can be applicable in other contexts or not, since this study focused on trust, perceived risk, shopping enjoyment and site design quality in relation to consumers’ online purchase intentions regarding cosmetic products. Therefore the gained results concern the industry of cosmetic products and in order to draw further conclusions regarding the theory of the different variables further studies are needed.

8.4 Future research

In this study it has been concluded that trust, shopping enjoyment, site design quality predicts the online purchase intention in cosmetic products. More in-depth and exactly what cosmetic online stores should do to develop is not dealt with in this study. Due to the fact that the hypotheses were not supported in the age group 51+ years, it would be interesting to further investigate their online purchase intention. The researcher could conduct a qualitative research in order to gain a deeper understanding of their online purchase intention and might also include variables such as online adoption and familiarity.

It could also be interesting to investigate this study’s independent variables: trust, perceived risk, shopping enjoyment and site design quality separately in one study and to see the impact on the online purchase intention. That would also make it possible for the researcher to go in more deep in that chosen independent variable and detect what aspects of that independent variable is essential and why.
Reference list


Kim, L, Kim, D, & Leong, J (2005), 'The effect of perceived risk on purchase intention in purchasing airline tickets online', *Journal Of Hospitality & Leisure*


Lim, N (2003), 'Consumers’ perceived risk: sources versus consequences', *Electronic Commerce Research And Applications*, 2, Selected Papers from the Pacific Asia


Appendices

Appendix 1: Questionnaire in English

We are two students from Linnaeus University in Växjö that are writing our bachelor's thesis. We would like your help to be able to conclude our study. We are asking you to answer questions regarding your online purchase intention in cosmetic products and if specific factors are related to your cosmetic online purchase intention. Your answers will be treated anonymously. It takes about five minutes to answer the questionnaire. If you have any questions about the questionnaire or our study contact shirinaliyar@gmail.com or claramutambala@gmail.com

The stated questions are about cosmetic online stores in general. In this study cosmetic products is referred to products such as: skincare products, hair care products, make-up products, fragrances and personal hygiene products.

Best regards,
Shirin Aliyar and Clara Mutambala

1. Have you ever visited a cosmetic online store?
   - Yes
   - No

2. How often do you visit cosmetic online stores?
   - Quite often 1 2 3 4 5 6 7 Never

3. In what purpose do you visit cosmetic online stores? (Fill in all the alternatives that suits well with your visits)
   - Browse with no special intention
   - Gain information about cosmetic products
   - Purchase cosmetic products
   - I don’t visit cosmetic online stores
Hereunder several statements are presented, please read the statements carefully and fill in that alternative that suits you best at a scale from 1-7. The alternative 1 = strongly disagree and 7 = strongly agree.

4. I am positive towards purchasing cosmetic products online
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

5. It is likely that I will purchase cosmetic products from cosmetic online stores in the near future (i.e. the next three months)
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

6. I have the intention to purchase cosmetic products online
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

7. I believe that cosmetic online stores have my best interest in mind.
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

8. I believe that cosmetic online stores keep their promises and commitments.
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

9. I believe that cosmetic online stores would not behave opportunistically (i.e. take advantage of a situation)
   Strongly disagree  1 2 3 4 5 6 7  Strongly agree

10. I believe that cosmetic online stores are trustworthy
    Strongly disagree  1 2 3 4 5 6 7  Strongly agree

11. I am concerned about the privacy of my personal information during a transaction with cosmetic online stores
    Strongly disagree  1 2 3 4 5 6 7  Strongly agree

12. I feel secure to transact with cosmetic online stores
13. I am concerned that cosmetic online stores will collect too much information about me

14. Cosmetic online stores usually ensure that transactional information is protected.

15. I enjoy shopping cosmetic products online

16. Shopping cosmetic products online provides me with a lot of enjoyment

17. I enjoy browsing for cosmetic products online

18. I perceive the technical quality (i.e. the navigation) on cosmetic online stores’ websites appealing

19. I perceive the content quality (i.e. the information) on cosmetic online stores’ websites appealing

20. I perceive the appearance quality (i.e. the overall graphical look) on cosmetic online stores’ websites appealing
21. Which of the following alternatives suits you best:
   - I have the intention to purchase cosmetic products online
   - I don’t have the intention to purchase cosmetic products online

Gender:
   - Male
   - Female

Age:
   - 18-30
   - 31-50
   - 51+
Appendix 2: Questionnaire in Swedish

Vi är två studenter från Linnéuniversitetet i Växjö som skriver vår kandidatuppsats. Nu vill vi gärna ha din hjälp för att komma fram till en slutsats i vår studie. I den här enkäten ber vi dig besvara frågor som rör din köpintention av kosmetiska produkter online. Dina svar kommer att behandlas helt anonymt. Det tar ca 5 minuter att besvara enkäten. Vid frågor kring enkäten eller vår studie kontakta shirinaliyar@gmail.com eller claramutambala@gmail.com.

Frågorna i enkäten handlar om kosmetika online butiker i allmänhet. I denna enkät innefattar kosmetiska produkter: hudvårdsprodukter, hårprodukter, smink, dofter och hygienartiklar.

Med vänlig hälsning
Shirin Aliyar and Clara Mutambala

1. Har du någonsin besökt en kosmetika butik online?
   ○ Ja
   ○ Nej

2. Hur ofta besöker du kosmetika butiker online?

   Väldigt ofta 1 2 3 4 5 6 7 Aldrig

3. Varför besöker du kosmetika butiker online? (Kryssa i alla alternativ som stämmer överens med dina besök)

   ○ Surfar utan något speciellt syfte
   ○ Samlar information om kosmetika produkter
   ○ Köper kosmetika produkter
   ○ Jag besöker inte kosmetika online butiker
Här nedan presenteras ett antal påståenden, var vänlig och läs påståendena noggrant och kryssa i det alternativ som stämmer bäst överens för dig på en skala från 1-7. Svarsalternativ 1=stämmer inte alls och 7 = stämmer helt.

4. Jag är positivt inställd till att köpa kosmetiska produkter online
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

5. Det är sannolikt att jag kommer köpa kosmetika produkter från kosmetika butiker online inom den närmsta framtiden (d.v.s. inom de närmsta tre månaderna).
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

6. Jag har för avsikt att köpa kosmetika produkter online
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

7. Jag tror att kosmetika online butiker har mitt bästa i åtanke
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

8. Jag tror att kosmetika butiker online håller sina löften och åtaganden
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

9. Jag tror att kosmetika butiker online inte skulle utnyttja mig
   - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

10. Jag tror att kosmetika butiker online är pålitliga
    - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

11. Jag är orolig för privatheten kring min personliga information under ett köp med kosmetika butiker online
    - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

12. Jag känner mig trygg med att köpa kosmetika produkter online
    - Stämmer inte alls 1 2 3 4 5 6 7  - Stämmer helt

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13. Jag är orolig över att kosmetika butiker online ska samla för mycket information om mig under ett köp.

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

14. Kosmetiska butiker online säkerställer att min transaktions information är skyddad.

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

15. Jag tycker om att köpa kosmetika produkter online

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

16. Att köpa kosmetika produkter online är ett nöje för mig

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

17. Jag tycker om att surfa efter kosmetika produkter

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

18. Jag gillar teknisk kvalité (d.v.s. navigeringen) på kosmetika online butikers hemsidor

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

19. Jag gillar kvalité på innehållet (d.v.s. informationen) på kosmetika online butikers hemsidor

   Stämmer inte alls  1  2  3  4  5  6  7   Stämmer helt

98
20. Jag gillar visuell kvalité (d.v.s. det övergripande grafiska utseendet) på kosmetika online butikers hemsidor

Stämmer inte alls  1  2  3  4  5  6  7  Stämmer helt

21. Vilket av följande påståenden passar bäst in på dig:

- Jag har för avsikt att köpa kosmetika produkter online
- Jag har inte för avsikt att köpa kosmetika produkter online

Kön:

- Man
- Kvinnan

Ålder:

- 18-30
- 31-50
- 51+
Appendix 3: Multiple regression requirements

The authors of this study carefully followed all of the required steps in order to control if the data could be analysed in a multiple regression analysis.

![Figure 27: Scatterplot partial regression (Own, 2015).](image)

![Figure 28: Scatterplot partial regression (Own, 2015).](image)

![Figure 29: Scatterplot partial regression (Own, 2015).](image)

![Figure 30: Scatterplot partial regression (Own, 2015).](image)

The scatterplots on partial regression that are presented in the plots above in figures 27, 28, 29 and 30, showed a somewhat linear relationship between the variables trust, perceived risk, shopping enjoyment, site design quality and online purchase intention. The relationships are not U-shaped between the independent variables and dependent variable.
Furthermore, the plotted studentized residual against the unstandardized predicted values showed homoscedasticity, the values were spread out to the same extent and indicates that the data has been approximately normally distributed, if not the values would have fallen further from the line.

<table>
<thead>
<tr>
<th>Case number</th>
<th>Std. Residual</th>
<th>Purchase intention</th>
<th>Predicted value</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>3,345</td>
<td>7,00</td>
<td>2,7952</td>
<td>4,20480</td>
</tr>
<tr>
<td>239</td>
<td>3,082</td>
<td>6,33</td>
<td>2,4600</td>
<td>3,87338</td>
</tr>
</tbody>
</table>

Figure 32: Outliers (Own, 2015)

Two outliers were detected see the table above in figure 32, although they were considered to have no crucial effect on the overall result, therefore the authors decided to keep all the respondents in the data.
The charts above in figure 33 and figure 34 are used to help one decide on how the data has been distributed and they show that the data has been approximately normally distributed.
Appendix 4: Source criticism

The most important thing to remember when evaluating sources is to be critical in order to determine if they are trustworthy or not (Dawidowicz, 2010; Randolph, 2009; Thurén, 2013). Trustworthiness, time-related, independency and tendency freedom are according to Thurén (2013) four principles of source criticism that can be applied in the evaluation of a source. That means that the information in the source must be what it is claimed to be and the older one source is the less trustworthy it becomes. Furthermore, a source should be primary and not a reference or copy of another source. Lastly, Thurén states the source should not give a false impression of the information in terms of individual, political or economic influences.

All of the utilized sources in this study have during the process repeatedly and carefully been controlled in order to make sure that they are accurate and primary. The information that has been used derives from either the result and/or the conclusion part of the different studies and hence, the requirement of primary information have been fulfilled. It has also been controlled that the information in the sources is what it is claimed to be. One of the sources that could be considered as out of date is Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. New Jersey: Prentice-Hall. This source is considered relevant in order to explain what purchase intention is and the authors developed what the theory of reason action is. Therefore, it was decided that the source is the most suitable to explain the concept and how it is connected to purchase intention.

In the theory chapter about trust, two sources were used that could be considered as old. Those were written by Mayer and Davis, and Schoorman (1995), “An intergrative model of organizational trust” and Morgan & Hunt (1994), “The commitment-trust theory of relationship marketing”. These sources were used in this study even though they could be regarded as old because of the fact that they explain the theory of trust in the conclusion of their papers well and properly. These sources is regarded as relevant to explain what trust is and to give the reader an insight of the concept. When trust is discussed in the theory chapter concerning trust in an online setting, more updated sources are used.