Likelihood of Using Online Personalization Services
An Explanatory Study
Abstract

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Title: Likelihood of Using Online Personalization Services: An Explanatory Study
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Background: Online personalization is the result of the rapid technological and digital development where consumers are provided products, services and content based on their individual preferences. Various research has been conducted regarding what factors influence the utilization and acceptance of personalization but does not provide a holistic view on the unified relationship of the recurrent variables of value for personalization, concern for privacy and trust building factors towards likelihood of using online personalization services.

Purpose: The purpose of this research is to explain the relationship of value for personalization, concern for privacy, and trust building factors with the likelihood of using online personalization services.

Methodology: This research replicated Chellappa and Sin’s (2005) research by modifying their theoretical model and testing it in another context. An explanatory, deductive, quantitative research approach and cross-sectional research design were utilized within this research, where self-completed questionnaires were distributed online with a number of 228 valid responses collected.

Findings: The findings demonstrate that the new theoretical model is significant and that it explains the likelihood of using online personalization services with 62.3%. Value for personalization and concern for privacy are considered highly significant and
are thus accepted hypotheses, while trust building factors is not considered significant and therefore rejected.

**Conclusion:** This research provides an insight into consumers’ usage decision in regards to likelihood of using personalization. It also provides a furthering on prior research in regards to a theoretical development, the modified model tested in a new context, but also in the findings in how the three independent variables affect the dependent variable. In addition, this research provides support for practitioners of online personalization services to understand which factors actually affect consumers’ usage decision, and can potentially develop strategies accordingly.

**Keywords:** Personalization; Online Personalization Services; Likelihood of Using Online Personalization Services; Value for Personalization; Concern for Privacy; Trust Building Factors
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Växjö, 2017-05-24

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1 Introduction

This chapter introduces the overall background of personalization services, a discussion of the problematization around the phenomenon of personalization services, as well as the variables value for personalization, concern for privacy and trust building factors. Finally, the purpose of this research is presented.

1.1 Background

With the continuous development of technology, online accessibility and the evolvement of the Internet, companies have been forced to reorganize their marketing strategies (Kotler et al., 2005). Concurrently with the technology development, online software systems were established which allowed companies to computerize their business (Wind and Rangaswam, 2001). As a result of this digitalization that spread among companies, strategies such as online personalization could advance (ibid.). Companies could therefore more easily adopt and utilize such online personalization strategies, which in turn allowed companies to successfully distinguish differences and similarities among consumers (Kasanoff, 2009; Kasanoff in Tseng and Piller, 2010). These differences and similarities could then be utilized in order to acknowledge each individual separately and offer individuals products, services, offers, content and recommendations best suited for them (Storbacka and Lehtinen, 2000; Kasanoff, 2009; Kasanoff in Tseng and Piller, 2010; Kotler and Armstrong, 2016).

Online personalization is based on collecting consumer data and information, such as consumer’s personal information, previous behavioral data and preferences (Kotler and Armstrong, 2016). This information could for example contain contact information, transaction history and page visits on company websites (ibid.), and is gathered either manually by consumers voluntarily sharing data or automatically by consumer’s web page clicks and keyboard inputs (Priyadharshini and Mathew, 2016). Personalization is, therefore, formed based on the information gathered from and during the consumer’s search- and purchase process (Arora et al. 2008), where personalization can be based on both individual preferences and the preferences shared with others, such as in-group members that the individual associates with (Kramer, Spolter-Weisfeld and Thakkar, 2007). Since personalization emerges from the collected data about consumers’ preferences, the premise that these preferences are important for the customers (ibid.)
and that it mirrors the customers’ tastes, personalization is utilized in order to guide the consumer to products, services, offers, content and recommendations found suitable for them (Arora et al., 2008). As such, the process of personalization relies on what and how much is known about consumers (Wind and Rangaswam, 2001), the capacity to gather and process such consumer information and the willingness of consumers to share information and utilize personalized services (Chellappa and Sin, 2005; Kotler and Armstrong, 2016).

1.2 Problem Discussion

There are several benefits for both the company and the consumer with the use of personalization, where a company gain value in form of information that can be used to build profitable relationships (Kotler and Armstrong, 2016) and customers gain online personalization in terms of products and services which are tailored to their interests and preferences (Priyadharshini and Mathew, 2016). However, collecting and utilizing the information and data of consumers can be considered invasive and as such consumers can become reluctant to provide personal information and thus fail to take advantage of the potential value the service can provide (Culnan, 2000; Adolphs and Winkelmann, 2010; Priyadharshini and Mathew, 2016). In turn, this may result in a decline in consumers’ perception and attitude towards the company and the company can suffer by losing recurring customers due to not acknowledging such customer concerns (Ball, Coelho and Vilares, 2006).

However, it is not only of importance for companies to acknowledge consumer concerns, but also to address other factors which influence consumers to use online personalization services. Various research has been conducted regarding what impacts consumers’ attitude towards, acceptance of and usage of personalization services in which three main core concepts are prevalent and recurrent, namely perceived value (Chen and Dubinsky, 2003; Liang, Lai, and Ku, 2006; Pechpeyrou, 2009; Leppäniemi, Karjaluoto and Saarihjärvi, 2017), privacy concerns (Sheehan and Hoy, 2000; Graeff and Harmon, 2002; Paine et al., 2007; Anton, Earp and Young, 2010) and trust (Gefen, 2000; Gefen, 2002; McKnight, Choudhury and Kacmar, 2002; Gefen, Karahanna and Straub, 2003; Lee, Ang and Dubelaar, 2005; Chang, Cheung and Tang, 2012).

Most researchers do not have a complete and integrated view on these variables and instead primarily research these variables separately and independently (Adolphs and
However, the researchers Chellappa and Sin (2005) developed and tested an explanatory model with the objective to predict consumers’ likelihood of using online personalization services as a consequence of the consumers’ value for personalization, the consumers’ concern for privacy as well as the effect of trust building factors. Chellappa and Sin (2005) also researched and found a relationship between trust building factors and concern for privacy. While this relationship was demonstrated to exist within their research, it is also argued that this specific relationship between trust and privacy is highly contextual (Bansal, Zahedi and Gefen, 2015). This indicates that the relationship varies and changes over time settings, locations and personal attributes of those partaking in the research and thus reduces the generalizability of this relationship (ibid.). As such, the research of this study has avoided researching the relationship between concern for privacy and trust building factors.

Further on, the user value for personalization is explained as the customer response to personalization services and to the degree to which the consumer regards personalization as valuable and satisfactory (Simonson, 2005; Ho, 2006). The notion that consumers find value in personalization services supports the fact that these services initially emerged to create additional value for the consumer (Pötzsch, 2009). Value has, therefore, been concluded by multiple researchers as an important factor to investigate in the research of personalization (Chellappa and Sin, 2005; Simonson, 2005; Ho, 2006; Shen, 2014; Leppäniemi, Karjaluoto and Saarijärvi, 2017). However, while personalization can lead to a more satisfactory consumer experience in form of personalized services, it is not always beneficial for the consumer as it is dependent on consumer information and data and thus comes at a cost (Priyadharshini and Mathew, 2016). Providing such information and data entails the customer to partly relinquish privacy, and is therefore an important notion for practitioners to consider and actively strive to avoid (O’Malley, Patterson and Evans, 1997; Culnan, 2000; Chellappa and Sin, 2005; Ho, 2006; Sundar and Marathe, 2010; Bleier and Eisenbeiss, 2015; Priyadharshini and Mathew, 2016; Kokolakis, 2017). Additionally, as trust is an important part and factor in most interpersonal and profit-oriented relationships (McKnight and Chervany, 2011), it is a factor which affects consumer behaviour in regards to personalization as well (Moorman, Deshpandé and Zaltman, 1993; Komiak and Benbasat, 2006; Coelho and Henseler, 2012; Bleier and Eisenbeiss, 2015). While trust is often gained, trust can
also be actively built and enhanced which in turn can result in a competitive advantage for businesses and practitioners (Van Dyke, Midha and Nemati, 2007).

Research regarding personalization should thus not solely be based on the potential value gained, nor the potential privacy forfeit, but also the trust building factors. However, while these underlying influential factors to the usage of personalization services are well-researched separately and sometimes independently, little research exists which combines these three variables into a single model (Adolphs and Winkelmann, 2010). Researching such variables separately thus fails to provide a holistic view on how these three variables combined influence the likelihood of using online personalization services. Having a holistic viewpoint can provide valuable insight to which variable are the most impactful and thus serve as a foundation to managerial decisions.

While Chellappa and Sin (2005) investigated the relationships between these independent variables to the dependent variable likelihood of using online personalization services with statistical certainty, the well-renowned philosopher of science Karl Popper (2005) argues that all scientific theories should continuously be put up to critical tests and scrutiny. By doing so, a theory is corroborated as it has survived rigorous tests to falsify it, and is thus verified and/or acceptable for the time being (Popper, 2005). Chellappa and Sin (2005) argue in a similar manner that their results suffer from the problem of generalizability and that the results should not only be considered as scientific pending replication and verification, but also that the model should be tested in different contexts. As such, this serves an opportunity to further scrutinize Chellappa and Sin’s (2005) findings by testing the model in a different context in terms of another country and another population, but also in a contemporary time setting since technology, Internet and the usage of these have evolved during the last decade.

Additionally, a replication would allow both the theoretical content and the theoretical structure to be developed with additional and alternative research to, in the end, further progress the model as well as further the area of personalization both for academics and practitioners. Researching such factors could therefore serve as a foundation for companies and practitioners to further understand how affecting variables in a
personalization setting can influence customers’ likelihood of using online personalization services.

1.3 Purpose

The purpose of this study is to explain the relationship of value for personalization, concern for privacy, and trust building factors with the likelihood of using online personalization services.
2 Theoretical Framework

The chapter of the theoretical framework presents the theoretical concepts regarding personalization and the underlying factors of the likelihood of using online personalization services, as well as the concepts value for personalization, concern for privacy and trust building factors.

2.1 Likelihood of Using Personalization Services

The service of online personalization entails automatized tailoring of website content (Lavie et al., 2009), personalized messages, advertisements, search engine results and product/service offers and recommendations to match individual customer preferences and interest based on previous online behavior (Vesanen, 2007; Arora et al., 2008; Montgomery and Smith, 2009). Such previous online behavior entails actual transactions made (ibid.), but also browsing behavior, such as which specific items are ignored or clicked on as well as how much time is spent considering a purchase, is registered (Montgomery and Smith, 2009). For this research, the aspect of product/service recommendations on a website, such as on an online vendor’s website (Adolphs and Winkelmann, 2010), have been applied and utilized. To predict consumers’ behaviors in relation to these personalization services, consumer attitudes can be analyzed as these affect the intention of using personalization services (Venkatesh et al., 2003). This can be done via examining underlying elements of behavior and behavioral acceptance of technology and information technology (Venkatesh and Davis, 2000; Venkatesh et al., 2003).

There are four main elements in order to determine behavioral intention called performance expectancy (Venkatesh et al., 2003), effort expectancy (ibid.), perceived behavioral control (Ajzen, 1991; Madden, Ellen and Ajzen, 1992) and social influence (Venkatesh et al., 2003). Performance expectancy is the perceived usefulness to an individual (Venkatesh and Davis, 2000; Venkatesh et al., 2003) and is based on the perceived outcome of a specific behavior which in turn forms how the consumer decides to act (Ajzen, 1991). Effort expectancy is the perceived degree of ease or difficulty of use, or in other words the effort an individual would have to put into using or learning the technology (Venkatesh and Davis, 2000; Venkatesh et al., 2003). The perceived behavioral control refers to people’s perception of the control they are having
over performing a behavior, i.e. an action (Ajzen, 1991; Madden, Ellen and Ajzen, 1992). That is, if an individual feels confident in performing a behavior, the intention to perform this behavior increases as well (Ajzen, 1991; Madden, Ellen and Ajzen, 1992). Social influence is how social norms, social relationships, others’ opinions and the individual’s beliefs of these can influence an individual to incorporate the norms and opinions of others as his or her own, thus influencing the behavioral intentions (Venkatesh and Davis, 2000; Venkatesh, et al., 2003). The individual’s beliefs of the level of approval or disapproval of others influence the behavioral intentions and the attitude toward the behavior of the individual (Ajzen, 1991). Knowing, analyzing and probing these elements and factors can be utilized to predict future behavior and future behavioral intentions (ibid.).

2.2 Value for Personalization

The concept of customer value has multiple definitions but one that is widely accepted and acknowledged is Zeithaml’s (1988, p.14) definition: “Perceived value is the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Woodruff, 1997; Chen and Dubinsky, 2003; Ruiz et al., 2008; Leppäniemi, Karjaluoto and Saarijärvi, 2017). Customer value is thus determined by the calculated perceived benefit gained in a trade-off for costs and sacrifices (Zeithaml, 1988; Woodruff, 1997; Chen and Dubinsky, 2003; Vesanen, 2007; Kumar and Reinartz, 2016). This trade-off process arises when the customer first evaluates if the perceived benefits are greater than the costs, and then compare this specific offer to other offers in the market to assess if the value from the original offer is satisfactory (Kumar and Reinartz, 2016). Such involuntary costs, also called perceived sacrifice or perceived loss, that accompany offers can be both monetary and nonmonetary where the customer tries to evaluate a purchase to make sure it is worth its outcome (Ruiz et al., 2008).

The perceived benefits incorporate customer perceived and experienced benefits in form of overall experience (Chen and Dubinsky, 2003; Vesanen, 2007), improved communication (Miceli, Ricotta and Costabile, 2007; Vesanen, 2007) and relevant information (Chen and Dubinsky, 2003; Liang, Lai, and Ku, 2006; Pechpeyrou, 2009). Rather than the customer providing service for themselves, a company can provide service by personalizing information for the customer to raise the customer experience
(Chen and Dubinsky, 2003; Vesanen, 2007). The personalized information further advances the interaction between the two parties (Miceli, Ricotta and Costabile, 2007; Vesanen, 2007) where the communication between the consumer and the company is improved (Miceli, Ricotta and Costabile, 2007). Providing personalization services additionally facilitate the relevancy aspect by helping the customer finding what they are looking for (Liang, Lai, and Ku, 2006; Pechpeyrou, 2009). Such personalization services increase the user value when generating relevant suggestions that fits the consumer’s interests (ibid.). This can be in form of both expected and unexpected items which can help the customer save time as the customer does not need to search for the product or service themselves (Pechpeyrou, 2009).

2.3 Concern for Privacy

In order to tackle the concept of privacy concerns and why it exists, the meaning of privacy should be explained (Li, 2014) and a recurring aspect of privacy and the concern for privacy is that of information privacy (Min and Kim, 2015). Numerous attempts to define information privacy have been undertaken but the most recurring and acknowledge definition is one made by Alan Westin (Paine et al., 2007; Taddicken, 2014; Li, 2014; Min and Kim, 2015). According to Westin (ibid.), information privacy applies to individuals and their ability to control what type of information that is revealed and to what extent it is accessible to others.

A lack of control and perceived lack of control over this information can result in privacy concerns (Graeff and Harmon, 2002; Anton, Earp and Young, 2010). This concern occurs when consumers are unaware of how companies collect, acquire and utilize data about them (Graeff and Harmon, 2002; Anton, Earp and Young, 2010), and the consumers control of the information transaction is felt to be minimized (Sheehan and Hoy, 2000; Norberg, Horne and Horne, 2007). The gathering of consumer information has been considered to be one of three consumer concerns, the other two being concerns in regards to information storage and information transfer (Anton, Earp and Young, 2010). Information transfer and information storage has been considered significant since consumers feel that their security is at risk (Paine et al., 2007). Such risk and safety concerns include the actual and perceived unauthorized use and access to personal information, such as identity theft and hacking, which in turn is considered to be a concern for privacy (Bellman et al., 2004; Paine et al., 2007). Consumers often feel
more safe using traditional channels, such as using one’s credit card in physical stores, than digital ones and thus demonstrates how consumers’ level of privacy concerns are related to the perceived level of safeness (Graeff and Harmon, 2002).

Another underlying reason to why consumers experience privacy concerns is lack of familiarity (Sheehan and Hoy, 2000; Paine et al., 2007; Taddicken, 2014; Li, 2014). Lack of familiarity has been described as consumers being reluctant towards the unfamiliar (Sheehan and Hoy, 2000) and as the consumers’ inexperience (Paine et al., 2007; Taddicken, 2014; Li, 2014). Consumers tend to stay within certain area of familiarity and necessity when browsing and purchasing, the consumer’s level of information disclosure is therefore depending on the level of familiarity towards their browsing and purchase activity (Taddicken, 2014; Li, 2014).

2.4 Trust Building Factors

Trust is a complex concept with various underlying variables of how trust is formed, maintained and what influences trust (McKnight, Choudhury and Kacmar, 2002). Trust is based on risk and the acceptance of risk as future outcomes are not known where one party voluntarily relinquishes control over the situation and put confidence, dependence and reliance in the other party (Lewis and Wieger, 1985; McKnight, Cummings and Chervany, 1998; Rousseau et al., 1998; McKnight, Choudhury and Kacmar, 2002; Urban, Amyx and Lorenzon, 2009). Trust is also the willingness to rely on others while simultaneously being willing to be vulnerable to others (Rousseau et al., 1998), such as when giving personal information and depending on the other party to keep the information private (McKnight, Choudhury and Kacmar, 2002).

Trust can be both built and maintained depending on various factors (Chang, Cheung and Tang, 2012). These trust building factors include transparency (Dhaliwal and Benbasat, 1996; Gregor and Benbasat, 1999; Pu and Chen, 2007; Nilashi et al., 2016), empowering consumers (Kim and Kim 2011; Midha, 2012; Mothersbaugh, Foxx and Beatty, 2012; Van Dyke, Midha and Nemati, 2007) and signaling trustworthiness (Kim and Kim, 2011; Lee, Ang and Dubelaar, 2005; Xu et al., 2011; Chang, Cheung and Tang, 2012; Midha, 2012).
Consumer trust can also be built through company transparency and perceived transparency. While transparency regards various aspects, it can be described as “[...] individual’s subjective perception of being informed about the relevant actions and properties of the other party in the interaction” (Eggert and Helm, 2003, p. 103). In order for an individual to be informed, and thus also a high level of transparency of the other party, providing explanations is a significant key component (Pu and Chen, 2007; Nilashi et al., 2016). Explanations entails providing reasons and justifications for how and why companies conduct business, such as subjecting consumers to certain behaviors, activities and information (Dhaliwal and Benbasat, 1996; Gregor and Benbasat, 1999; Eggbert and Helm, 2003).

Empowering consumers is the actual and perceived control consumers hold over their own personal information and its utilization (Van Dyke, Midha and Nemati, 2007; Kim and Kim, 2010; Mothersbaugh, Foxx and Beatty, 2012; Midha, 2012). Additionally, empowering consumers has a positive relationship to trust as it shifts control from the company to the consumer (ibid.). This entails that consumers have an increased level of control while also being provided access to the information that has been collected (Van Dyke, Midha and Nemati, 2007).

Signaling trustworthiness entails communicating, providing and utilizing trust building features such as company privacy policy, what kind of information the company collects and how it is used, and third party seals or certifications which ensures the trustworthiness of the website and/or online vendor (Gefen, Karahanna and Straub, 2003; Lee, Ang and Dubelaar, 2005; Kim and Kim, 2011; Xu et al., 2011; Chang, Cheung and Tang, 2012; Midha, 2012). Having a reliable third party certifying the trustworthiness, such as the ensurance of trustworthy business and privacy practices, transfers trust from the third party to the website and/or company and thus increases consumers’ perceived reliability and trustworthiness of it (Gefen, Karahanna and Straub, 2003; Kim and Kim, 2011; Chang, Cheung and Tang, 2012).
3 Conceptualization

The following subchapters presents the conceptualization of the theoretical concepts, the corresponding hypotheses regarding these concepts and the theoretical model utilized for this study.

3.1 Value for Personalization and Likelihood of Using Personalization Services

After reviewing former research in the theoretical framework, it was demonstrated that the perceived value in the trade-off in form of increased experience (Chen and Dubinsky, 2003), improved communication with the company (Miceli, Ricotta and Costabile, 2007; Vesanen, 2007), relevant information (Liang, Lai, and Ku, 2006; Pechpeyrou, 2009), as well as time saving benefits increased due to personalization services (Pechpeyrou, 2009). Therefore, it is likely that value for personalization has a positive relationship to the likelihood of using online personalization offers. That is, when the value increases, the likelihood of using personalized offers online increases as well. Therefore, we state the following hypothesis:

H1: Value for personalization has a positive relationship with the likelihood of using online personalization services.

3.2 Concern for Privacy and Likelihood of Using Personalization Services

The theoretical framework demonstrates that privacy concerns arise when consumers feel a lack of familiarity regarding their browsing and purchase activity (Taddicken, 2014; Li, 2014), a lack of control over their information in terms of the gathering and utilization of consumer information (Graeff and Harmon, 2002; Anton, Earp and Young, 2010), and the concern for the level of risk the information is at in terms of unauthorized access and usage of personal information. Since these factors have been influential factors in the formation of privacy concerns when using consumer information (Bellman et al., 2004; Paine et al., 2007), it is, therefore, likely that concern for privacy also has a negative relationship with the likelihood of using online personalization services as well. That is, when privacy concerns increase, the likelihood
of using online personalized services decreases. Therefore, we state the following hypothesis:

H2: Concern for privacy has a negative relationship with the likelihood of using online personalization services.

3.3 Trust Building Factors and Likelihood of Using Personalization Services

The theoretical framework demonstrates that trust can be built and enhanced through consumer empowerment, such as control over, choice regarding and access to personal information, and through signaling trust, such as via privacy policies and third party certification, as well as transparency, explaining how and why consumers are subject to certain behavior (Eggbert and Helm, 2003; Van Dyke, Midha and Nemati, 2007; Midha, 2012). Since consumers trustworthiness in companies increases when companies ensure and increase trust building factors it is, therefore, likely that trust building factors have a positive relationship with the likelihood of using online personalization services. That is, when trust building factors increases, the likelihood of using online personalization services increases as well. Therefore, we state the following hypothesis:

H3: Trust building factors have a positive relationship with the likelihood of using online personalization services.

Figure 1: Consumers’ Likelihood of Using Personalization Services In an Online Context (Modified From Chellappa and Sin, 2005, p.190).
4 Methodology

In this chapter each methodological choice that has been made is presented and justified. The chapter present how the research has been conducted through replication, through its chosen research approach, strategy and design, and how the data has been collected and analyzed. The final subchapters presents how validity and reliability has been ensured and how ethical aspects have been taken into considerations.

4.1 Replication

Replication is considered as a crucial part of the research field but while it is considered crucial, it is seldom conducted (Berthon et al., 2002). There is a myriad of definitions of what replication is and consists of, but it can be summarized and described as duplicating and imitating an entire previous study in terms of theory, method and context, or to duplicate certain parts of it (Lykken, 1968; Berthon et al., 2002). For this study, the topic of interest was initially chosen and reviewed in order to fully comprehend what factors and variables came across as significant within the field. After reviewing the research area, Chellappa and Sin’s (2005) article was finally chosen due to the topic at hand, but also due to the three relevant independent variables within the model. The researchers of this study, thereafter, decided to replicate and further scrutinize the model and findings of this study in order to further contribute to the field of understanding the likelihood of using online personalization services.

When taking an existing theory and methodology and testing it in a new context to explain the outcome, the strategy of context-only extension is employed (Berthon et al., 2002). That is why Chellappa and Sin’s previously tested hypotheses as well as the article’s methodology was replicated, but applied within a new context. Consequently, a context-only extension has therefore been utilized within the research of this study, where the hypotheses of Chellappa and Sin (2005) have been tested in the new context of time, as well as within a new country and a new population in order to explain the results.
4.2 Research Approach

4.2.1 Deductive Research

The deductive research design is a research approach to use when explaining the relationship between theory and research (Neuman, 2003; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). This approach aims to test a theory, where the approach is based on logic and follows a linear sequence throughout the research process (Bryman and Bell, 2011). The deduction process starts with testing existing literature by putting forward a set of hypotheses, which are later tested and examined by collecting data. The hypotheses are then rejected or confirmed in order to falsify or corroborate the theory (Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016).

Furthermore, the methodology within a deductive approach includes operationalized concepts in order to enable measurability of a quantitative structure (Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). A deductive approach also commonly requires a structured methodology in order to facilitate future researchers to replicate the exact steps of the study (Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). Due to this study being a replication of a former research, this study has derived from existing theory, a deductive research approach has, therefore, been considered to be the most appropriate research approach. The methodology therefore follows a structure which allows future researchers to keep scrutinize the findings to further test the theory (Bryman and Bell, 2011).

4.2.2 Quantitative Research

Quantitative research uses a deductive approach to the development of theory and view reality as objective and external (Bryman and Bell, 2011; Bryman, 2016). A research following the quantitative structure is conducted objectively and often conducted on a large number of people which provide 'hard data’ (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011; Bryman, 2016; Saunders, Lewis and Thornhill, 2016). This ‘hard data’ is presented through numbers rather than words, which is one of the characteristics of a quantitative research strategy since it enables the data to be statistically tested and analyzed (ibid.). Even though the quantitative strategy is criticized to sometimes lose social contexts when redefining concepts into statistical units, it can, however, often be generalized from the sample onto the actual population.
being studied due to the research being conducted on a larger sample number (Bryman and Bell, 2011).

Furthermore, in the quantitative research strategy, the importance of being transparent is emphasized in regards to how the findings are discovered and analyzed (Bryman and Bell, 2011). This is important in order for other researchers to be able to replicate a former quantitative study and to test relationships between certain variables (Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). Since this research stems out of previous research, this research seeks to further test the relationship between variables priorly established by other researchers. To further replicate and test the relationship between variables, numeric and statistical data is required in order to analyze the relationship (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011; Bryman, 2016; Saunders, Lewis and Thornhill, 2016). As such, the quantitative research approach was deemed most suitable for the study and chosen in order to accurately test and analyze the relationship between variables. Furthermore, the quantitative approach was chosen as replicability and transparency is a key component of such research (Bryman and Bell, 2011; Bryman, 2016). Providing a clear and transparent methodology of what and how results were discovered and analyzed further increases its replicability and its reliability, which in turn strengthens the results and theoretical implications of the study (Bryman and Bell, 2011).

4.3 Research Design

Research design is the structure which guides the research (Bryman and Bell, 2011), but also concerns how to conduct the research and the strategy behind it (Saunders, Lewis and Thornhill, 2016). Furthermore, a research design is the plan of how to convert the objectives of a research into information which is measurable and valid (Nardi, 2003). There is a range of research methods, techniques and approaches (Zikmund et al., 2009; Bryman and Bell, 2011) that can be categorized in various different research designs (Bryman and Bell, 2011) depending on the specific purpose of the study (Neuman, 2003). One of these is the explanatory research design in which researchers seek to explain the relationship between variables and to identify the causes for the relationship (Neuman, 2003; Saunders, Lewis and Thornhill, 2016). This approach aims to answer the underlying questions of ‘how’ and ‘why’ a certain phenomena exists, such as the range of and differences in certain behaviors or attitudes (Nardi, 2003). Considering this
specific study aims to further the research within this area, and to explain the nature of the relationship between the independent variables to the dependent variable, the explanatory research design was deemed most appropriate.

Bryman and Bell (2011) further categorize research design into five prominent approaches, of which the cross-sectional research design has been utilized in this research. Cross-sectional research collects data of more than one case, at a single point in time to find patterns in the phenomenon of interest (Bryman and Bell, 2011; Neuman, 2003; Zikmund et al., 2009). This allow the researcher to see a relationship between and among variables which in turn can be further investigated (Bryman and Bell, 2011; Zikmund et al., 2009). The cross-sectional approach was chosen and utilized in this research in order to explain the relationship between variables in a specific moment in time and due to how the approach is considered to be both time and resource efficient (Nardi, 2003).

4.4 Data Collection Method

A researcher can collect different types of data when conducting a research, depending on the purpose of the study (Adams, Raeside and White, 2007; Bryman and Bell, 2011). One of the types of data that can be gathered is primary data, which is data collected by the researcher rather than relying on data collected by others (Adams, Raeside and White, 2007). This allows the researcher to gather relevant data for a specific purpose (ibid.) and to make sure there is a consistency between the gathered data and the purpose (Zikmund et al., 2009; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). The primary data collection approach was chosen for this specific research in order to retrieve prevalent and relevant data to test Chelappa and Sin’s (2005) result in another context.

Depending on the research approach of the study, there are different methodologies that can be utilized to collect primary data (Bryman and Bell, 2011). One methodological approach within the quantitative approach is surveys (ibid.). Surveys can be conducted through self-completion questionnaires, where the researchers conduct a survey with a standardized set of questions that are completed by the respondent without the researcher being present (Zikmund et al., 2009; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). Since the researcher is not present when respondents fill in
the questionnaire, a possible disadvantage is that the items cannot be clarified nor can it be checked instantly if any items have been unanswered (Nardi, 2003; Neuman, 2003). However, this can be counteracted by conducting a pretest prior to the actual distribution in order to minimize any confusion or misunderstandings regarding the items (ibid.). Furthermore, having the researcher not present increases the validation of the result since the respondent cannot be influenced by the researcher and further ensures the anonymity of respondents (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011).

Although questionnaires often have a low response rate in relation to the number of questionnaires distributed, self-completion questionnaires can be distributed to a large sample within a short time-frame (Nardi, 2003). Due to the resource and time efficiency for both researchers and participants of utilizing questionnaires, and the possibility to gather large amounts of primary data (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011), this method was chosen for this study. Due to the rapid distribution and collection advantages as well as the time and cost saving benefits, the questionnaire of this research was distributed digitally as it allows the participants to be able to read, answer and complete the questions on their own terms (Neuman, 2003).

4.4.1 Operationalization and Measurement of Variables

An operationalization clarifies and defines theoretical constructs into measurable concepts, that in turn can be conceptualized into relevant questions for the research (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). In the operationalization, the concepts are assigned indicators to be able to decode the responses into quantifiable concepts (Bryman and Bell, 2011). This coding can be measured in several different ways, where the researcher either create new measures or use other researchers’ measures as guidelines (Neuman, 2003; Zikmund et al., 2009; Saunders, Lewis and Thornhill, 2016).

In order to gather appropriate data, a suitable measurement scale should be identified for each chosen variable (Zikmund et al., 2009). There are mainly four measurement scales called the nominal scale, the ordinal scale, the interval scale and the ratio scale (Zikmund et al., 2009; Bryman and Bell, 2011). The nominal scale includes categorical variables and assigns a value to an object in order to classify or identify it (ibid.). The
ordinal scale is a ranking scale that has the purpose of arranging alternatives in order of, for example age or number of times shopping per year (ibid.). The interval scale includes range categories that has equal distance between them (ibid.). The highest level of measurement scale is the ratio scale, and it can contain both the interval scales characteristic and the absolute scales, meaning the scale starts with an absolute zero (ibid.).

Within this research, the nominal scale was utilized to measure the control questions in the beginning of the questionnaire, as well as for the control variable question Filt1 in order to record the variable gender. For the control variables Filt2 and 3, the ordinal scale was utilized. The five-point Likert Scale was used as an interval scale to measure each item in the dependent and independent variables, where the assigned number 1 is “Strongly Disagree” and number 5 is “Strongly Agree”. The ratio scale was implemented at the end of the questionnaire in order to ensure the possibility for the respondents to add additional information if they feel it is needed.
### 4.4.1.1 Operationalization Tables

<table>
<thead>
<tr>
<th>Theoretical Construct</th>
<th>Item Number</th>
<th>Indicator</th>
<th>Type of Measurement</th>
<th>Description</th>
<th>Item on Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>Like1</td>
<td>Performance Expectancy</td>
<td>Five Point Likert Scale</td>
<td>The perceived usefulness to an individual based on the perceived outcome of a behavior (Ajzen, 1991)</td>
<td>I believe personalization services will be useful to me</td>
</tr>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>Like2</td>
<td>Effort Expectancy</td>
<td>Five Point Likert Scale</td>
<td>The effort an individual would have to put into using or learning the technology (Venkatesh and Davis, 2000; Venkatesh, Morris, Davis and Davis, 2003)</td>
<td>I believe personalization services will be easy to use</td>
</tr>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>Like3</td>
<td>Perceived Behavioral Control</td>
<td>Five Point Likert Scale</td>
<td>People’s perceived control over performing a behavior (Ajzen, 1991; Madden, Ellen and Ajzen, 1992)</td>
<td>I feel confident in my usage of personalization services</td>
</tr>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>Like4</td>
<td>Social Influence</td>
<td>Five Point Likert Scale</td>
<td>How social norms, relationships and opinions of others influence an individual (Venkatesh and Davis, 2000; Venkatesh, Morris, Davis and Davis, 2003)</td>
<td>Others speaking positively about personalization services makes me want to use personalization services</td>
</tr>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>Like5</td>
<td>Attitude</td>
<td>Five Point Likert Scale</td>
<td>As consumer attitudes affect the intention of using personalization services, these can be measured to predict future behavior (Venkatesh et al., 2003)</td>
<td>I intend to use personalization services in the future</td>
</tr>
</tbody>
</table>

Table 1: Likelihood of Using Personalization Services

<table>
<thead>
<tr>
<th>Theoretical Construct</th>
<th>Item Number</th>
<th>Indicator</th>
<th>Type of Measurement</th>
<th>Description</th>
<th>Item on Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for Personalization</td>
<td>Value1</td>
<td>Experience</td>
<td>Five Point Likert Scale</td>
<td>The perceived benefits gained from personalization services to improve the overall experience (Woodruff, 1997; Kumar and Reinartz, 2016)</td>
<td>I believe personalization services improve my usage experience</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>Value2</td>
<td>Communication</td>
<td>Five Point Likert Scale</td>
<td>Advancement of interaction that leads to a better communication between the consumer and the company (Miceli, Ricotta, and Costabile, 2007)</td>
<td>I believe personalization services improve the communication with the online vendor</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>Value3</td>
<td>Relevancy</td>
<td>Five Point Likert Scale</td>
<td>Information that is relevant to the customer’s interests (Liang, Lai, and Ku, 2006)</td>
<td>I believe personalization services provide information relevant to my interests</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>Value4</td>
<td>Time</td>
<td>Five Point Likert Scale</td>
<td>The time customers saves when not having to search for products/services themselves (Pechpeyrou, 2009)</td>
<td>I believe using personalization services saves time</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>Value5</td>
<td>Trade-off</td>
<td>Five Point Likert Scale</td>
<td>The perceived benefit gained in a trade-off with the perceived cost sacrificed (Woodruff, 1997; Chen and Dubinsky, 2003; Kumar and Reinartz, 2016)</td>
<td>I believe personalization services are beneficial to me</td>
</tr>
</tbody>
</table>

Table 2: Value for Personalization
<table>
<thead>
<tr>
<th>Theoretical Construct</th>
<th>Item Number</th>
<th>Indicator</th>
<th>Type of Measurement</th>
<th>Description</th>
<th>Item on Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concern for Privacy</td>
<td>Priv1</td>
<td>Information Collection</td>
<td>Five Point Likert</td>
<td>The process of how/how much information/data is collected about consumers (Graefl and Harmon, 2002; Antion, Earp and Young, 2010)</td>
<td>I am concerned that online vendors are collecting too much personal information about me</td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>Priv2</td>
<td>Information Usage</td>
<td>Five Point Likert</td>
<td>To utilize the collected consumer information in some way, such as through information transfers (Graefl and Harmon, 2002; Antion, Earp and Young, 2010)</td>
<td>I am concerned about how my personal information which can identify me is used by online vendors</td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>Priv3</td>
<td>Unauthorized Secondary Use</td>
<td>Five Point Likert</td>
<td>To access and use a consumer’s personal information without their permission (Bellman et al., 2004; Paine et al., 2007).</td>
<td>I am concerned about unauthorized access to my personal information</td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>Priv4</td>
<td>Safety and Risk Orientation</td>
<td>Five Point Likert</td>
<td>How consumer information is transferred, stored and how safe the information is (Paine et al., 2007)</td>
<td>I do not think it is risky to provide my personal information when I buy something online - (reverse coded)</td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>Priv5</td>
<td>Familiarity</td>
<td>Five Point Likert</td>
<td>The level of familiarity and experience a consumer has towards their browsing and purchase activity (Paine et al., 2007; Taddicken, 2014; Li, 2014)</td>
<td>I am comfortable giving out information to a website that I am familiar with it - (reverse coded)</td>
</tr>
</tbody>
</table>

Table 3: Concern for Privacy

<table>
<thead>
<tr>
<th>Theoretical Construct</th>
<th>Item Number</th>
<th>Indicator</th>
<th>Type of Measurement</th>
<th>Description</th>
<th>Item on Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Building Factors</td>
<td>Trust1</td>
<td>Consumer Empowerment - Control</td>
<td>Five Point Likert</td>
<td>The consumers' actual and perceived control over their personal information and its utilization (Midha, 2007; Van Dyke, Midha and Nemati, 2007; Kim and Kim, 2011)</td>
<td>I prefer to purchase from online vendors that provides me with control over how my personal information is used</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>Trust2</td>
<td>Consumer Empowerment - Access</td>
<td>Five Point Likert</td>
<td>Providing consumers access to the information that has been collected (Van Dyke, Midha and Nemati, 2007)</td>
<td>I prefer to purchase from online vendors that provides me with access to what personal information is collected about me</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>Trust3</td>
<td>Consumer Empowerment - Transparency</td>
<td>Five Point Likert</td>
<td>Explaining the reasons and justifications to why a consumer is subjected to certain company behaviors, activities and information (Dhaliwal and Benbasat, 1996; Gregor and Benbasat, 1999)</td>
<td>I prefer to purchase from online vendors that explain how personalization services are tailored to me</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>Trust4</td>
<td>Signaling Trustworthiness - Privacy policy</td>
<td>Five Point Likert</td>
<td>What kind of information a company collects and how it is used (Gefen, Karahanna and Straub, 2003; Lee, Ang and Dubelaar, 2005; Kim and Kim, 2011; Midha, 2012)</td>
<td>I believe that online vendors who have a privacy policy protects my personal information</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>Trust5</td>
<td>Signaling Trustworthiness - Third party certification / seals</td>
<td>Five Point Likert</td>
<td>Third party authorities/institutions which ensures the trustworthiness of a company and/or website (Midha, 2007; Kim and Kim, 2011; Chang, Cheung and Tang, 2012)</td>
<td>I feel safer shopping from online vendors when they have independent third party certification regarding the handling of personal information</td>
</tr>
</tbody>
</table>

Table 4: Trust Building Factors
4.4.2 Questionnaire Design

Questionnaire questions are typically close ended, meaning that there is only a set amount of alternatives the participants can choose from, with the exception of a possibility for the researcher to include one or two open questions in where participants can answer freely and in their own words (Neuman, 2003; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). While open ended questions provide depth and further insight, using such questions is time and effort demanding on both researchers and participants, and is likely to result in participants not answering these questions due to the time and effort having to be put into carefully considering and writing elaborate answers to these (Neuman, 2003; Bryman and Bell, 2011). Due to the disadvantages of open ended questions, such questions have been avoided wherever possible in this research to increase the likelihood of responses and to lessen the strain on both the researchers’ and participants’ time and resources.

When designing the items, questions and statements, of the questionnaire, the researchers of this study followed the suggestions of Neuman (2003) and Bryman and Bell (2011) such as to avoid leading items that could influence the participant’s answers and avoid having several items merged into one. In order to prevent response bias and/or answers that are socially desirable, the questionnaire within this research included two reversed items. This means that the direction of the statements were both positively formulated but also negatively formulated in order to avoid a participant’s answers to all be ‘disagree’ or ‘agree’ (ibid.). Furthermore, in line with these authors’ suggestions, the questionnaire items of this research have been constructed with the aim to be as easily understandable as possible in terms of phrasing and wording as to avoid too long item statements and participant confusion.

The questions within the questionnaire went from general items to more specific ones, since these early items are directly linked to the research topic and sets the tone for the rest of the questionnaire (Nardi, 2003). Two control questions were initially asked in order to ensure that only qualified participants answered the rest of the questionnaire. That is, if the respondents were younger than 18 years old or if the respondents did not have any previous online purchase experience, they would not be able to continue the survey. This was done due to legal reasons since including under-aged individuals in
questionnaire may require parental approval (Codex, n.d.), as well as the questionnaire containing questions that would not be relevant or fully understandable to those with a complete lack of online purchase experience. The participants eligible to continue the questionnaire would get through the control questions and continue answering the statements that followed. After the control questions, the 5 statements related to the dependent variable were asked, following the 15 statements connected to the three independent variables. After the statements related to the variables, an open ended question was asked in order to obtain additional information or concerns that the participants had. The questionnaire finished off with three filter questions regarding age, gender and how often the participant shops online. Since these three questions were considered to be sensitive questions, they were placed in the end of the questionnaire (Nardi, 2003; Bryman and Bell, 2011).

Instructions, explanation to the purpose of the questionnaire, the assurance of anonymity and a short presentation of the researchers of this study was attached to the questionnaire as these improves the response rate (Bryman and Bell, 2011). For this research, the introduction of the questionnaire started off with a thank you statement to show appreciation to the participants, a short presentation of the researchers of the study, a description of the topic of the research, then finishing off with an approximate time to complete the questionnaire and a statement of confidentiality assurance. The questionnaire was distributed to a Swedish audience, and as such was translated into Swedish in order to avoid confusion regarding the questions as all individuals are not equally proficient in English. The translation of the introduction and questions of the questionnaire can be found in ‘Appendix A’ and the complete Swedish questionnaire and its design can be found in ‘Appendix B’.

4.4.3 Pretest

Before distributing a questionnaire, it should be pretested to ensure that the design of the instrument works well (Adams, Raeside and White, 2007; Bryman and Bell, 2011; May, 2011; Zikmund et al., 2009). Although the items might be perceived as clear by the researcher, it is not always the case for the respondents who are answering the questionnaire, which can affect the reliability and the validity of the test (May, 2011). A pretest can put the questionnaire and its items to the test and make sure they are understandable, that the item order/sequence is logical and that the questionnaire format
is reasonable (Nardi, 2003; Bryman and Bell, 2011). The pretest is often conducted in form of interviewees (Adams, Raeside and White, 2007; May, 2011), where the respondents complete the questionnaire under supervision and is interviewed regarding their overall perceptions of the questionnaire and its items as well as if and what improvements can be made (Nardi, 2003; Adams, Raeside and White, 2007). Furthermore, the participants of the pretest should not be part of the actual questionnaire as they have already seen the questionnaire and its items and this can thus result in response bias and possibly affect the results (Nardi, 2003).

For this study, the pretest was conducted by choosing a sample based on specific subgroups where the participants fulfill certain criteria, in order to get a fairly relative representation of the population studied (Neuman, 2003; Adams, Raeside and White, 2007; Saunders, Lewis and Thornhill, 2016). The criteria for this pretest was to include various types of individuals, such as both female and male participants, as well as older and younger participants. This was done in order to gain multiple viewpoints in order to ensure that all questions were comprehensible. Furthermore, three knowledgeable professionals within the academic and practical field of marketing were included in the pretest in order to ensure the relevance and value of the constructed items. All the participants first answered the items in the questionnaire on their own and were then interviewed in regards to how and if they understood the items correctly or if there were any confusion.

For the initial pretest, 25 participants took part and it resulted in showing that the explanation of the personalization services was not sufficient and some respondents also tended to skip reading the introduction. That is why the questionnaire was modified by adding a sentence asking the respondents to read the introduction before answering the questions. The explanation of personalization services was also clarified, as well as included where needed rather than just having it in the introduction, in case some respondents would forget or get confused about what personalization services were. Due to these modification, an additional pretest was conducted where 10 participants were included to participate. As the participants from the second pretest did not have any further concerns or confusions regarding the items, the results was considered satisfactory and the distribution of the questionnaire could thus begin. Those participating in the two pretests were asked not to participate in the actual questionnaire in order to avoid response bias.
4.5 Sampling

When sampling a population, the researcher is taking a small sample that is representative to the larger population (Adams, Raeside and White, 2007; Zikmund et al., 2009). For the sample to be truly representative, every characteristic in the population must be included (Zikmund et al., 2009). The probability sampling, sometimes referred to as random sampling, is the method most often used in a quantitative research due to the possibility of generalizing the findings since every individual in the population has an equal chance of being chosen (Adams, Raeside and White, 2007; May, 2011). However, if all the members of the population cannot be identified and have an equal opportunity to be included into a sampling frame, the probability sampling method cannot be used and the non-probability sampling method needs to be implemented instead (Saunders, Lewis and Thornhill, 2016). Considering the substantial population this study addresses, it was unachievable to identify, equally represent and ensure equal opportunity and chance to include all the individuals of the whole population in the study. As such, a probability approach could not be implemented and instead the non-probability sampling technique was chosen as a sampling method for this research.

In the non-probability sampling technique there are different sub-methods in how to conduct non-probability sampling where one is the convenience sampling (Neuman, 2003; Adams, Raeside and White, 2007; Bryman and Bell, 2011; May, 2011). One of those methods is convenience sampling which is when the researcher chooses the sample on the basis of what is easily accessible (Adams, Raeside and White, 2007; Malhotra and Birks, 2007; Bryman and Bell, 2011). The convenience sampling was chosen as the sampling approach for this study since it is a practical as well as a resource and time efficient approach (Nardi, 2003; Malhotra and Birks, 2007) and thus deemed suitable due to the time and resource constraints of this research.

4.5.1 Sample Selection

For this research, the aim was to study the phenomenon of likelihood of using online personalization services from a general point of view rather than within a certain subgroup of people. This allow the researchers to more clearly analyze and explain the relationship between the dependent and the independent variables rather than focusing on the relationship between the variables to a specific group of people. As
such, the population of this study was online consumers as a whole where different ages, genders and online shopping frequencies have been represented. Due to the convenience sampling method being utilized and that the researchers of this research being located in Sweden, the population was limited to Sweden as well in order to avoid possible cultural and societal difference of other nationalities impacting the answers of the questionnaire. Considering 90% of Swedish consumers purchase products/services online occasionally, and 49% buys products/services once a month (Davidsson and Findahl, 2016), it is demonstrated that a large portion of the entire population shop online at a regular basis. Those between the ages 16 and 55, more than 90% purchase something online occasionally, while more than 76% of ages between 56 and 75 and 59% of those older than 75 purchase something online occasionally (ibid). As such, a large and varied population of Swedish consumers are likely to be exposed to and/or use personalization services and thus also suitable for this study.

It is not solely the population that needs to be addressed when choosing samples, but also the sample size (Adams, Raeside and White, 2007). Although there are no clear rules to follow when deciding what makes the sample statistically justified, a generally accepted idea is that, combined with other statistical aspects of sampling, the bigger the sample size, the more precise and representative it is of the population (Malhotra and Birks, 2007). However, other aspects determine the size of the sample as well. These include the number of variables, the sample size of other similar studies as such can be utilized as guidelines in non-probability sampling and the resources available to the researchers (ibid.). As non-probability and convenience sampling was chosen due to time and resource constraints, this too have affected the sample size of this specific research. The research conducted by Chellappa and Sin (2005) obtained 243 responses and as the research of this paper replicates Chellappa and Sin (2005), their sample size was considered as a rough guideline to the sample size required for the research of this study. This is supported by Malhotra and Birks (2007) who demonstrate that, among studies that are being tested in marketing research, a sample size of 200 to 300 participants is common.

In order to calculate the appropriate sample size used in examining relationships between variables, the following rule of thumb formula, presented by Morgan and
Wilson Van Voorhis (2007) to generate a satisfactory sample size, has been considered and used to determine the minimum sample size:

\[ N > 50 + 8m \]

**N**: Sample size  
**m**: Number of independent variables (IV)

This formula yields a minimum sample size of 74 and therefore an absolute minimum sample size was set at 74. Furthermore, if researchers wish to determine which variable is the most important or impactful, a rule of thumb is that a sample size of 100 is considered poor, 200 is fair, 300 is good, 500 very good and 1000 is an excellent sample size (Morgan and Wilson Van Voorhis, 2007). Based on this and the previously discussed sample size considerations, the researchers of this study have strived for the research to have approximately 200 valid participants with the absolute minimum of 74. The questionnaire of this research resulted in a total number of 229 participants, of which 228 were valid for this research.

4.6 Data Analysis Method

4.6.1 Data Coding and Data Entry

When the answers from the questionnaire were compiled, the process of data entry began. All the answers from the control questions, dependent and independent variables, additional question and control variables were inserted into SPSS, where they were coded in order to make it possible to do a statistical analysis (Bryman and Bell, 2011). The control questions were coded Con1-2, the likelihood of using online personalization services were coded Like1-5, value for personalization were coded Value1-5, concern for privacy were coded Priv1-5, trust building factors were coded Trust1-5, additional question were coded Add1 and the control variables were coded Filt1-3.

When all the data were inserted into SPSS, each questionnaire from the respondents were given a number, in order to make it easier to follow which specific item answer were connected to which respondent number. Out of 229 respondents that participated in the questionnaire, 1 was not eligible since they did not pass the control questions and was therefore not included in the statistical analysis. A five-point Likert Scale were used.
to measure all dependent and independent variables, the answers from these variables were, therefore, given a number from 1-5. The items which utilized nominal, ratio and ordinal scales, such as Con1-2, Add1 and Filt1-3, were recoded into numbers. Two questions were reverse coded (Priv4 and Priv5) and were therefore inverted before proceeding with the statistical analysis tests in SPSS.

4.6.2 Descriptive Statistics

Descriptive statistics is used when working with numerical data and facilitates the researcher to summarize and characterize data in an apprehensible way in order to describe and compare variables through numbers (Zikmund et al., 2009; Saunders, Lewis and Thornhill, 2016). According to Saunders, Lewis and Thornhill (2016), the data description can be done through the central tendency and the dispersion. The central tendency is mainly measured through the mean which is the most common central tendency measurement that is calculating the average value (Zikmund et al., 2009; Saunders, Lewis and Thornhill, 2016). Aside from describing the mean, how the data varies from the mean is also significant (ibid.). The spread of the data around the central tendency can be measured and described through the dispersion (ibid.). One way of describing the dispersion is through the standard deviation, which is how values diverge from the mean value (Saunders, Lewis and Thornhill, 2016). The greater the disparity of the values, the more they differ from the mean (Zikmund et al., 2009; Bryman and Bell, 2011).

Furthermore, to get an understanding of the data the shape of the data distribution is relevant. This can be established by examining the skewness and kurtosis. The data, the distribution, can either be symmetric or skewed (Malhotra and Birks, 2007). The skewness, therefore, demonstrates the direction of the mean deviations (Malhotra and Birks, 2007). If the skewness value for a data is negative, then a negative skew is indicated and if the value is positive, then the data is said to be positively skewed (Hair et al., 2006; Malhotra and Birks, 2007). The kurtosis shows how the peak of a distribution is more or less peaked than a normal distribution (ibid.). If the kurtosis is negative, the peak of the distribution is flatter than a normal distribution, while the distribution is more peaked if the kurtosis is positive (ibid.). A normal distribution has the kurtosis of 0 and the more a distribution depart from 0, the more the data is indicated to not be normally distributed (ibid.). The acceptable value range for kurtosis
values should be between ±3, while skewness should range between ±1 (Hair et al., 2006).

4.6.3 Correlation Analysis and Regression Analysis

Correlation analysis is the main technique used in order to find out if there is a relationship, a correlation, between variables and how strong this relationship is (Zikmund et al., 2009). The technique is most commonly used when finding correlation for interval and/or ratio variables and is done through the help of the correlation coefficient (ibid.). The correlation coefficient, also denoted as r, is the strength of the relationship between variables and ranges from -1 to 1, where -1 is a perfect negative relationship and 1 is a perfect positive relationship (Nardi, 2003; Zikmund et al., 2009). Furthermore, a correlation coefficient of less than 0.3 is considered as weak, between 0.3 and 0.7 are considered moderate relationship and above 0.7 are considered as a strong relationship (Nardi, 2003). In other words, the closer to ±1 the correlation efficient is, the stronger the relationship.

Another technique to measure the relationship between variables is the regression analysis (Zikmund et al., 2009; Saunders, Lewis and Thornhill, 2016). Regression analysis is utilized to determine whether a relationship between all independent variables and the dependant variable exist and as well as the strength of this relationship through multiple linear regression (Malhotra and Birks, 2007; Zikmund et al., 2009; Bryman and Bell, 2011). Multiple regression analysis can be used to determine how big of a percentage a dependent variable is explained by all independent variables combined, denoted as $R^2$, which ranges from 0 to 1 (ibid.). $R^2$, also called the coefficient of determination, measures the strength of association (Malhotra and Birks, 2007; Aaker et al., 2011). Adjusted $R^2$ is a modification of $R^2$ and takes the number of independent variables into consideration, and is the amount the independent variable explains a dependent variable (ibid.).

Furthermore, when working with regression analysis the standard error (SE) is commonly used, which is described as the standard deviation of a statistic’s sampling distribution (Nardi, 2003; Malhotra and Birks, 2007). One of the common standard error statistics is standard error of the estimate (S.E.est) (Malhotra and Birks, 2007). The S.E.est is used to assess the accuracy of the predictions made with the regression line.
and measures the dispersion in the predicted values in the regression (ibid.). If there is no dispersion, then the standard deviation would be zero, which means that the values are the same as the mean value (Zikmund et al., 2009; Bryman and Bell, 2011). A small value of S.E.est shows that the observed values are fairly close to the regression line while a large value of S.E.est shows that the observed values are expected to be further away from the regression line (Malhotra and Birks, 2007). The smaller the value of the standard error, the more representative and accurate the values are of the overall population (Nardi, 2003; Malhotra and Birks, 2007).

Another value that is useful when explaining regression results is standardized regression coefficient ($\beta$) which is commonly labeled as beta in statistical software programs (Zikmund et al., 2009; Aaker et al., 2011). In multiple regression, beta ($\beta$) can be used to find out which independent variable is most predictive and impactful as it shows how the independent variable affects the dependent variable (ibid.). The beta ($\beta$) can either be positive or negative and the greater the value of the standardized regression coefficient, the greater the impact the independent variable has on the dependent variable and is measured in (Aaker et al., 2011). For example; if the beta ($\beta$) is 0.5, this means that if the independent variable increases by 1, the dependent variable increases with 0.5 (Aaker et al., 2011).

In order to test a hypothesis when applying multiple regression, the p-value approach can be utilized (Nardi, 2003). In order to do so, a significance level has to be set (ibid.). A commonly set significance level is 0.05, which means that there is a 5% probability of wrongly accepting a false hypothesis (ibid.). The p-value (labeled as sig.value in SPSS) is the probability of randomly obtaining a result causing a falsely accepted hypothesis (ibid.). If the p-value is less than the significance level, the results are considered significant and an accepted hypothesis is justified (ibid.). The level of significance set for this research was set at a maximum 0.05 and a p-value of less than 0.05 would thus produce an accepted hypothesis as the result would be deemed significant (ibid.). However, the results were found to be significant at the highest level of p-value, 0.001, which implies there is only 0.1% probability that the hypotheses are falsely accepted.
4.7 Quality Criteria

There are several ways to ensure the validity; whether a measurement is actually measuring the concept, and the reliability; the stability of a measurement over time and if measurements are consistent with other measurement, of a research study (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011). However, while some aspects of validity and reliability can be tested and ensured in advance, most are often determined once data has been collected (Nardi, 2003). Validity and reliability can be ensured either by conducting a prestudy to measure these or to utilize items and questions of other studies which have been proven to be valid and reliable (ibid.) The concepts of validity and reliability utilized for this study are presented in the following subchapters.

4.7.1 Face Validity

To determine whether a measurement accurately reflect and measure the research content and concept, face validity is the simplest form and approach to do so (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011; Zikmund et al., 2009). Face validity is a test and investigation where professionals, the scientific community and/or other individuals inspect and judge the relevance and logic of questions within a questionnaire in relation to the concepts (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011; Zikmund et al., 2009). Face validity entails whether a measure, indicator and item fully represent the concept at hand (Nardi, 2003; Neuman, 2003; Zikmund et al., 2009). Professionals, other researchers and/or peers should be utilized in order to determine the face validity of the items and concepts of the research (Nardi, 2003; Saunders, Lewis and Thornhill, 2016). In this line of reasoning, the approach of face validity was utilized when conducting the pretest of this research, where three knowledgeable professionals within the academic and practical field of marketing, as well as individuals corresponding to the relevant sample of the study were utilized in order to ensure the validity of the items in the questionnaire. These individuals inspected the questionnaire in order to see if the items were clear and that they truly represented the concepts they were supposed to represent.

4.7.2 Construct Validity

Another approach to determine the accuracy of research measurement is construct validity (Nardi, 2003; Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). This approach is conducted after data has been gathered and statistically analyzed
The construct validity entails measuring whether items measure the often abstract nature of a concept (ibid.). Construct validity is further categorized into convergent validity and discriminant validity, also known as divergent validity (Neuman, 2003). These two validities cooperate in a way that if convergent validity and discriminant validity is ensured then one can show that construct validity is ensured as well (Churchill, 1979). Convergent validity is how and whether items within a single variable are correlated and connected to one another (Churchill, 1979; Neuman, 2003). That is, items within a questionnaire regarding the same variable may have similar answers and, therefore, correlate with each other. This correlation should, however, be avoided across different variables to ensure that the items are not measuring the same things (Churchill, 1979). If the items within different variables are not correlated, discriminant validity is ensured (ibid.).

Within the research of this study, convergent validity of the items within each variable were ensured by testing their correlation and from the results, it was found that the items within each separate variable were related. In order to ensure discriminant validity, the correlation between the independent variables as well as their items were tested in order to measure whether they had a correlation to one another. It was found that none of the independent variables correlated with one another and none of the items within the independent variables correlated with items within another independent variable, as such no items were removed and discriminant validity was ensured as well.

4.7.3 Criterion Validity
One of the subconcepts within criterion validity is the concurrent validity (Neuman, 2003; Saunders, Lewis and Thornhill, 2016). Concurrent validity entails determining whether an item and/or measurement are similar compared to other conducted tests or standards (Nardi, 2003; Neuman, 2003). If the items and measurements are corresponding to other measurements, they are considered as valid (ibid.). For this study, other research of a similar nature which utilized similar variables and items have been reviewed in order to ensure that constructed items of the questionnaire of this study were of a similar nature and quality of those within other research. By reviewing other research and the items in those, the researchers of this study used and modified other researcher’s items when conducting the items for the dependent and independent variables. This was conducted in order to raise the understandability of the variables’
items and in order to raise the validity of them. The criterion validity, in terms of the concurrent validity, was later reached and ensured through hypothesis testing.

4.7.4 Reliability
Reliability is whether a measurement is consistent and stable, meaning that measurements should be the same, ceteris paribus (Nardi, 2003; Neuman, 2003; Bryman and Bell, 2011). Reliability can be examined by testing whether measurements deliver the same results and answers over time, whether the measurements and results are representative across different groups and whether the measurement deliver consistent results from different indicators and items of a specific variable (Neuman, 2003). A commonly used approach to test the reliability of measurements is the statistical measurement known as Cronbach’s alpha, or coefficient alpha (Neuman, 2003; Bryman and Bell, 2011; Zikmund et al., 2011; Vaske, Beaman and Sponarski, 2017). Cronbach’s alpha is normally a scale from 0 to 1 where the closer the alpha is to 1, the stronger the relation between items and thus also the reliability of the measurements (Bryman and Bell, 2011; Zikmund et al., 2011; Vaske, Beaman and Sponarski, 2017). While the minimum accepted level of the Cronbach’s alpha is debated among statisticians, several researchers argue that a Cronbach’s alpha between 0,65 and 0,8 should be regarded as sufficient and acceptable within, for example, human attitudes, behaviors and values. (Zikmund et al., 2011; Vaske, Beaman and Sponarski, 2017). As such, the lowest acceptable Cronbach’s alpha for this research was set at 0,65 and if any of the items would have a Cronbach’s alpha lower than 0,65, the item would be removed. The Cronbach’s alpha of the items for each variable of the research of this research ranged between 0,754 and 0,918 with a combined Cronbach’s alpha of 0,774 for all items within the questionnaire. As such, none of the items were removed from this research.

4.8 Ethical Considerations
Ethical issues are always apparent in situations where human interaction prevails, causing ethics to be an important factor to consider when conducting research (Zikmund et al., 2009). Ethics in business research is explained as incorporating principles and constitutions of moral behavior, which allow researchers to protect respondents from ethical issues while conducting research (May, 2011). Such ethical principles and constitutions are revolving around questions whether the research can harm a
respondent in any way, either physically or psychologically, if there is a lack of consent to participate due to undisclosed options to drop out, if there are transgression of privacy regulations, or if deception occurs when researchers present the study in a misrepresenting way (Zikmund et al., 2009; Bryman and Bell, 2011; Bryman, 2016). Many times research convey a rationalization of using different means to reach the ends of true science, but it is important not to consider the ethical issues in terms of what is beneficial for the study, but rather in terms of what is fair for all individuals involved in the study (May, 2011). That is why the respondents of the questionnaire have been treated ethically by ensuring anonymity, assuring that the instructions clarify what the research is about, as well as making sure the respondents know the researchers value their time given voluntarily.

In order for the participants to fully understand what personalization services are and what these are based on, that personalization is tailored to the specific consumer and the consumer’s preferences based on data and personal information, a description of the subject was provided. This was done to ensure transparency in order for respondents to receive a fair impression of the possible advantages and disadvantages of personalization services. Without a transparent description, it is possible that the participants would not have fully understood what personalization entails and thus be biased to answer a certain way.

It is argued, however, that ethical issues can never be completely eliminated or solved, but that the important part is to be aware of it in order to make ethical decisions and to know what the possible outcomes might be (Bryman and Bell, 2011; May, 2011; Bryman, 2016). In case respondents prior to this questionnaire were not aware of companies’ information gathering, this questionnaire may unintentionally cause privacy concerns due to users contemplating about it. Furthermore, by conducting research from the consumer’s viewpoint of personalization services, practitioners and researchers can understand why and how consumers behave in certain ways. By providing companies with implications on how to communicate to consumers properly in regards to the sensitive subject of information gathering within personalized settings, companies could potentially develop their strategies accordingly to reduce privacy concerns. However, while the results of this research can support managerial decisions to reduce privacy concerns, the results can also support practitioners to develop and improve consumers’
likelihood of using online personalization services. This, in turn, would result in more consumers using these services which would also result in gathering and utilizing consumers’ data and personal information. As previously discussed, privacy is in many cases a general concern for consumers and as such more data and information gathering may be troublesome and undesired by individuals.
5 Results

This chapter shows the result from the data analysis from SPSS. The chapter present the result from the descriptive statistics, reliability test, validity test through correlation analysis, and regression analysis, through which the quality criterias and hypothesis testing were tested.

5.1 Descriptive Statistics

When the answers from the questionnaire were gathered, the collected data was inserted into SPSS for further analysis. The descriptive statistics were first analyzed in order to get an overview of the answers from the control variables. In total 229 individuals participated in the questionnaire, which resulted in a total number of 228 valid respondents, since one of the participants did not pass the control question regarding online purchase. The respondents consisted of 37.3% men and 62.7% women (see Table 5). A majority of the respondents, 58.8%, were between the ages of 18-28, 10.5% between the ages 29-39, 12.3% between the ages 40-50, 14.5% between the ages 51-61 and 3.9% of the respondents were 62 years old or older (see Table 5).

The respondents could choose between seven categories when choosing the number of times the respondents made online purchases during a year. The majority of the respondents made online purchases 1-6 times per year, which accounted for 34.6% of the respondents. The second most chosen category was 7-11 times per year, with 28.1% of the respondents choosing this. The third most chosen category was 17 times or more per year, where 22.4% of the respondents chose this, followed by 13.6% of the respondents that made 12-16 online purchases per year and then 1.3% of the respondents showed that they made online purchases less than 1 time per year.
The descriptive statistics were also analyzed in order to show the minimum and maximum values, mean, standard deviation, skewness, and kurtosis. Both the dependent variable and the independent variables ranged from 1 to 5, on the five-point Likert scale. The lowest mean value was from item Priv5, from the variable Concern for Privacy, and had a mean of 2.71, while the highest mean value was from Trust1, from the variable trust building factors, which had a mean value of 4.05. Overall the items from trust building factors had high mean values, while the other variables’ items ranged around the mean value 3 and some towards the mean value 4. The std. deviation among the items ranges from 0.862-1.312, with the lowest std. deviation being from Like2 and the highest from Value4. The skewness values should range between ±1, while kurtosis should range between ±3 and as shown in Table 6 all variables were within the acceptable value range. Furthermore, all items, except Like4 and Priv5 had a negative

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>85</td>
<td>37.3</td>
</tr>
<tr>
<td>Woman</td>
<td>143</td>
<td>62.7</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-28</td>
<td>134</td>
<td>58.8</td>
</tr>
<tr>
<td>29-39</td>
<td>24</td>
<td>10.5</td>
</tr>
<tr>
<td>40-50</td>
<td>28</td>
<td>12.3</td>
</tr>
<tr>
<td>51-61</td>
<td>33</td>
<td>14.5</td>
</tr>
<tr>
<td>62+</td>
<td>9</td>
<td>3.9</td>
</tr>
<tr>
<td>OPPY*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 time per year</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>1-6 times per year</td>
<td>79</td>
<td>34.6</td>
</tr>
<tr>
<td>7-11 times per year</td>
<td>64</td>
<td>28.1</td>
</tr>
<tr>
<td>12-16 times per year</td>
<td>31</td>
<td>13.6</td>
</tr>
<tr>
<td>17 times or more per year</td>
<td>51</td>
<td>22.4</td>
</tr>
</tbody>
</table>

Table 5: Descriptive statistics of the control variables

n 228; OPPY = online purchase per year
skew ranging from -0.876 and -0.155 where trust building factors, except Trust4, ranged from -0.876 to -0.697 showing a negative skew close to -1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like1</td>
<td>1</td>
<td>5</td>
<td>3.32</td>
<td>1.078</td>
<td>-0.539</td>
<td>-0.368</td>
</tr>
<tr>
<td>Like2</td>
<td>1</td>
<td>5</td>
<td>3.92</td>
<td>0.862</td>
<td>-0.722</td>
<td>0.494</td>
</tr>
<tr>
<td>Like3</td>
<td>1</td>
<td>5</td>
<td>3.24</td>
<td>1.066</td>
<td>-0.164</td>
<td>-0.614</td>
</tr>
<tr>
<td>Like4</td>
<td>1</td>
<td>5</td>
<td>2.78</td>
<td>1.153</td>
<td>0.081</td>
<td>-0.655</td>
</tr>
<tr>
<td>Like5</td>
<td>1</td>
<td>5</td>
<td>3.07</td>
<td>1.159</td>
<td>-0.155</td>
<td>-0.783</td>
</tr>
<tr>
<td>Value1</td>
<td>1</td>
<td>5</td>
<td>3.06</td>
<td>1.226</td>
<td>-0.219</td>
<td>-0.908</td>
</tr>
<tr>
<td>Value2</td>
<td>1</td>
<td>5</td>
<td>3.10</td>
<td>1.250</td>
<td>-0.356</td>
<td>-0.923</td>
</tr>
<tr>
<td>Value3</td>
<td>1</td>
<td>5</td>
<td>3.44</td>
<td>1.107</td>
<td>-0.552</td>
<td>-0.303</td>
</tr>
<tr>
<td>Value4</td>
<td>1</td>
<td>5</td>
<td>3.18</td>
<td>1.312</td>
<td>-0.317</td>
<td>-1.036</td>
</tr>
<tr>
<td>Value5</td>
<td>1</td>
<td>5</td>
<td>3.09</td>
<td>1.199</td>
<td>-0.310</td>
<td>-0.817</td>
</tr>
<tr>
<td>Priv1</td>
<td>1</td>
<td>5</td>
<td>3.54</td>
<td>1.257</td>
<td>-0.489</td>
<td>-0.900</td>
</tr>
<tr>
<td>Priv2</td>
<td>1</td>
<td>5</td>
<td>3.52</td>
<td>1.278</td>
<td>-0.429</td>
<td>-1.013</td>
</tr>
<tr>
<td>Priv3</td>
<td>1</td>
<td>5</td>
<td>3.58</td>
<td>1.300</td>
<td>-0.573</td>
<td>-0.832</td>
</tr>
<tr>
<td>Priv4</td>
<td>1</td>
<td>5</td>
<td>3.27</td>
<td>1.233</td>
<td>-0.218</td>
<td>-0.982</td>
</tr>
<tr>
<td>Priv5</td>
<td>1</td>
<td>5</td>
<td>2.71</td>
<td>1.117</td>
<td>0.391</td>
<td>-0.605</td>
</tr>
<tr>
<td>Trust1</td>
<td>1</td>
<td>5</td>
<td>4.05</td>
<td>0.990</td>
<td>-0.757</td>
<td>-0.272</td>
</tr>
<tr>
<td>Trust2</td>
<td>1</td>
<td>5</td>
<td>4.04</td>
<td>1.040</td>
<td>-0.876</td>
<td>-0.032</td>
</tr>
<tr>
<td>Trust3</td>
<td>1</td>
<td>5</td>
<td>3.91</td>
<td>0.998</td>
<td>-0.734</td>
<td>-0.092</td>
</tr>
<tr>
<td>Trust4</td>
<td>1</td>
<td>5</td>
<td>3.63</td>
<td>0.978</td>
<td>-0.203</td>
<td>-0.704</td>
</tr>
<tr>
<td>Trust5</td>
<td>1</td>
<td>5</td>
<td>3.77</td>
<td>1.021</td>
<td>-0.697</td>
<td>-0.173</td>
</tr>
</tbody>
</table>

Table 6: Descriptive statistics of the dependent and independent variables

5.2 Quality Criteria

To ensure the reliability of both the study and the items in each concept, the test of Cronbach’s alpha coefficient was utilized. The dependent variable likelihood of using online personalization services had a Cronbach’s alpha value of 0.808. The independent variable value for personalization services had a Cronbach’s alpha of 0.918 while
concern for privacy had a Cronbach’s alpha of 0.825 and trust building factors had a Cronbach’s alpha of 0.754. All of the variables and its corresponding items reached the minimum score of 0.65 and was thus deemed reliable (see Table 7).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of Using Personalization Services</td>
<td>0.808</td>
<td>5</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>0.918</td>
<td>5</td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>0.825</td>
<td>5</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>0.754</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

*Table 7: Reliability test: Cronbach’s Alpha of the dependent and independent variables items*

Additionally, the constructs were tested for correlation to ensure the construct validity and by analyzing Table 8, it is shown that each construct had a low level of correlation at the 0.001 confidence level.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value for Personalization</th>
<th>Concern for Privacy</th>
<th>Trust Building Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for Personalization</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>-0.261****</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>0.082</td>
<td>0.232****</td>
<td></td>
</tr>
</tbody>
</table>

*n 228; ****, Correlation is significant at the 0.001 level (2-tailed)*

*Table 8: Validity test: Correlation of the independent variables*
5.3 Hypotheses Testing

A multiple linear regression analysis was conducted and provided information whether or not the model was significant, if the independent variables had a relationship with the dependent variable, as well as values such as b-value, beta (β), standard error of estimates and adjusted R².

The regression showed the b-values for the different models was positive and over the significance level, meaning they were testable. All four models, with the independent variables in each, as well as the fifth model with all the independent variables together, was established as significant at the significance level 0,001. Looking at the beta (β) value, the independent variable value for personalizations had a beta (β) value of 0,735 which indicates that the variable has a strong positive impact on the dependent variable of likelihood of using online personalization services. The independent variable concern for privacy has a beta (β) value of -0,174, showing there is a negative relationship with the dependent variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td>0,000****</td>
</tr>
<tr>
<td>Value for Personalization</td>
<td>0,735</td>
<td></td>
</tr>
<tr>
<td>Concern for Privacy</td>
<td>-0,174</td>
<td>0,000****</td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td>0,007</td>
<td>0,657</td>
</tr>
</tbody>
</table>

Table 9: Significance value of the model and the independent variables

Looking at the beta (β) for the control variables, there was no significant impact between gender, age or amount of online purchase per year to the likelihood of using online personalization services (see Table 10).

To estimate the accuracy of the predicted values, the standard error of estimate (S.E.est) was calculated, which showed a low number where the full model had a S.E.est at 0,489. This indicates that the values are fairly close to the regression line and is representative to the overall population. Value for personalization had a fairly low value
of S.E.est, 0.505 (see Model 2 in Table 10), while concern for privacy and trust building factors had a higher S.E.est, 0.753 and 0.808 respectively.

In order to accept or reject a hypothesis the sig.value of the independent variables needed to be below 0.05. The sig. value for value for personalization, H1, and concern for privacy, H2, were 0.000, meaning they were significant even at a sig.value of 0.001. However, the sig. value for trust building factors, H3, was 0.637. Since the sig. value for trust building factors, H3, was above 0.05, the hypothesis was rejected while H1 and H2 were accepted.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Exp. sign</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>3.172****</td>
<td>1.320****</td>
<td>4.270****</td>
<td>3.039****</td>
<td>1.916****</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.190)</td>
<td>(0.155)</td>
<td>(0.259)</td>
<td>(0.354)</td>
<td>(0.256)</td>
<td>(0.256)</td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>0.020</td>
<td>0.018</td>
<td>-0.044</td>
<td>0.023</td>
<td>-0.011</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.111)</td>
<td>(0.070)</td>
<td>(0.106)</td>
<td>(0.112)</td>
<td>(0.069)</td>
<td>(0.069)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>-0.033</td>
<td>-0.009</td>
<td>-0.013</td>
<td>-0.033</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.026)</td>
<td>(0.039)</td>
<td>(0.042)</td>
<td>(0.026)</td>
<td>(0.026)</td>
<td></td>
</tr>
<tr>
<td>OPPY - Online purchase per year</td>
<td></td>
<td>0.056</td>
<td>0.031</td>
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<td>0.056</td>
<td>0.022</td>
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<tr>
<td></td>
<td>(0.046)</td>
<td>(0.029)</td>
<td>(0.043)</td>
<td>(0.046)</td>
<td>(0.028)</td>
<td>(0.028)</td>
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<tr>
<td>Value for Personalization</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1: Value for personalization has a</td>
<td>+</td>
<td>0.780****</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Accepted</td>
</tr>
<tr>
<td>positive relationship with the</td>
<td></td>
<td>(0.032)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>likelihood of using personalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2: Concern for privacy has a negative</td>
<td>-</td>
<td></td>
<td>-0.369****</td>
<td></td>
<td>-0.174****</td>
<td></td>
<td>Accepted</td>
</tr>
<tr>
<td>relationship with the likelihood of</td>
<td></td>
<td></td>
<td>(0.054)</td>
<td></td>
<td>(0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>using personalization services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust Building Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3: Trust building factors has a</td>
<td>+</td>
<td></td>
<td></td>
<td>0.030</td>
<td></td>
<td>0.007</td>
<td>Rejected</td>
</tr>
<tr>
<td>positive relationship with the</td>
<td></td>
<td></td>
<td></td>
<td>(0.075)</td>
<td></td>
<td>(0.047)</td>
<td></td>
</tr>
<tr>
<td>likelihood of using personalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td>-0.08</td>
<td>0.605</td>
<td>0.120</td>
<td>-0.012</td>
<td>0.629</td>
<td></td>
</tr>
<tr>
<td>Std. Error of the Estimates</td>
<td></td>
<td>0.807</td>
<td>0.505</td>
<td>0.753</td>
<td>0.808</td>
<td>0.489</td>
<td></td>
</tr>
</tbody>
</table>

***p<0.001, n 228
S.E. (standard error) is presented within parenthesis for each of the independent variables.

Table 10: Multiple Linear Regression: Acceptance/rejection of the hypotheses
6 Discussion, Conclusion and Implications

This chapter presents a discussion regarding the research findings, including a discussion regarding the outcome of the hypotheses, as well as a conclusion of the purpose of this research, followed by theoretical and practical implications.

6.1 Discussion

The main findings of this study demonstrates that the presented theoretical model is significant and explains to a great extent the relationship of the likelihood of using online personalization services online. The multiple linear regression show that 62.3% of the likelihood of using online personalization services can be explained by value for personalization, concern for privacy and trust building factors. In turn, this implies that 37.7% of the likelihood of using online personalization services are explained by other variables. The hypotheses regarding the positive relationship of value for personalization services and the likelihood of using online personalization services (H1) as well as the negative relationship of concern for privacy and the likelihood of using online personalization services (H2) was accepted. Furthermore, the hypothesis of the positive relationship of trust building factors and the likelihood of using online personalization services (H3) was rejected.

When reviewing the results from the items in regards to value for personalization, the mean for all items were shown to be somewhat above the median value, 3, as well as having a slight negative skew, implying that the indicators of experience, communication, relevancy, time and trade-off was perceived as important. Both the mean value and the standard deviation is relatively similar throughout the questions, showing no specific indicator was more or less important in regards to the perceived value for personalization, as well as that the respondents answered similarly to the items.

The results demonstrate that consumers’ value for personalization services has both a significant impact on the likelihood of using online personalization services as well as explains a majority of the impact of the model. The findings, therefore, indicates that consumers’ assessment of utility and value is a driving force of consumers likelihood of using online personalization services. Considering that personalization services is
utilized by companies to create additional value for consumers (Arora et al., 2008; Priyadharshini and Mathew, 2016), the idea that consumers expect and recognize the value aspect of the service seems reasonable. If consumers would not perceive personalization services as valuable, there would most likely not be any motivation for the consumers to actually use the service. This can thus explain why the variable of value for personalization is of such significance and has such a strong influential impact on the dependent variable in the model.

Looking at the concern for privacy variable, four of the items is located in the vicinity of a mean value of 3,5 as well as a negative skew meaning the indicators information collection, information usage, unauthorized secondary use and safety and risk orientation are considered as somewhat important for consumers. However, the last item, Priv5, regarding familiarity had a low mean value at 2,71 as well a positive skew (0,391). This indicates that familiarity is not considered as an important factor in regards to privacy concerns and that the level of familiarity consumers have towards an online vendor does not affect the likelihood of using online personalization services. The standard deviation for each indicator was evenly balanced with a scope of 1,117-1,3, demonstrating the items have been answered similarly among the respondents. As expected, the results from the regression analysis demonstrates that the variable concern for privacy has a negative relationship with the dependent variable of likelihood of using personalizations services online. However, in comparison to the variable value for personalization, concern for privacy only explains a relatively small portion of the likelihood of using online personalization services.

The items concerning trust building factors has the highest mean value and the lowest standard deviation values throughout all questions. Although having relatively close values, the first two indicators of control and access have a somewhat higher value than the others with a mean value over 4, while the remaining three of transparency, privacy policy and third party certification/scale has a mean of 3,7 or higher. Furthermore, the standard deviation values for each question are relatively close as well with a range from 0,990-1,021, showing the answers from all respondents are fairly similar. Similarly, all items, except Trust4, has a negative skew close to -1 which demonstrate that participants answered similarly with a tendency towards ‘strongly agree’. However, although the descriptive statistics shows that there is an overall high tendency to
consider trust building factors to be of great importance, the results also demonstrate that there is no significant positive relationship between trust building factors and the likelihood of using online personalization services. That is, even though there is a general perception among consumers that trust building factors are important, this variable does not explain the likelihood of using online personalization services, nor does it explain the relationship within the model. In comparison to other researchers that demonstrated that trust building factors actually have a significant impact on consumer online behaviors (Urban, Amyx and Lorenzon, 2009; Aguirre et al., 2015), this result is somewhat unexpected. Due to consumer online behaviors similar to the behaviors when using personalization services online in terms of purchase intention, click-through rate and information sharing, have precedingly been established as affecting consumers’ intentions (ibid.), it would be expected that the results would rather show trust building factors being an influencer on the intention to use personalization services online. However, other research also found that individuals who consume and use the Internet, Internet services and online communities are more likely to trust online vendors (Urban, Amyx and Lorenzon, 2009). It is, therefore, possible that due to the high Internet experience and usage of the Swedish population as well as the frequent online purchases of the participants of this study (Davidsson and Findahl, 2016), consumers in Sweden potentially trust online vendors and as such trust building factors have no significant impact on the likelihood of using online personalization services in this specific context.

All of these factors together shows that, although consumers consider most of the indicators within value for personalization, concern for privacy and trust building factors is important in itself, only value for personalization and concern for privacy can be concluded as determinant factor in regards to the usage of personalization services online. However, although the relationship between concern for privacy and likelihood of using online personalization services is relatively small, there is a general tendency towards having concern for privacy if analyzing the mean value. Based on this results, the expected outcome would be for consumers to be reluctant towards using services where consumer privacy is exploited. However, this research indicates that consumer still proceed with behavior in contexts that cause privacy concerns and that the consumers are willing to risk their privacy even though they are concerned about it. This outcome might initially appear as unexpected, but could potentially be explained by the established phenomenon referred to as ‘the privacy paradox’ (Norberg, Horne
and Horne, 2007; Hallam and Zanella, 2017; Kokolakis, 2017). Privacy paradox is explained as occurring when an individual’s actual disclosure of information exceeds their intentions to disclose, meaning even though people with a negative view of disclosing personal information will under some circumstances still disclose their information (ibid.). That is, it can be argued that consumers potentially are willing to relinquish their privacy if valuable benefits are received as a result of the personal information provided. Consequently, this would explain the results where the variable value for personalization is a much stronger factor in comparison to the other variables.

![Figure 2: Accepted Model of Consumers’ Likelihood of Using Personalization Services In an Online Context](image)

6.2 Conclusion

This research demonstrates that the model of value for personalization, concern for privacy and trust building factors combined explain a considerable proportion (62.3%) of the likelihood of using online personalization services. The model by Chellappa and Sin (2005), modified for this research and employed within a new context, thus showed to be significant. While value for personalization holds the greatest explanatory power to the likelihood of using online personalization services, concern for privacy only explains a minor portion of it. Although not having the same numbers or ratio of influence, this results is in line with Chellappa and Sin (2005) that shows that value for personalization has twice as much influence in comparison to concern for privacy. The variable of trust building factors, however, did not show any considerable explanatory
power of the likelihood of using online personalization services. This is in contrast to Chellappa and Sin (2005) that, on the contrary, argued that trust building factors actually does play an influential role on a consumer’s intent to use online personalization services.

In conclusion, this research provide an insight into consumers’ usage decision in regards to likelihood of using online personalization services as a consequence of value for personalization, concern for privacy and trust building factors. It also provides a furthering on Chellappa and Sin’s (2005) findings in regards to a theoretical development, the modified model tested in a new context, but also in the findings in how the three independent variables affect the dependent variable. In addition, this research provides support for practitioners of online personalization services to understand which factors actually affect consumers’ usage decision, and can potentially develop strategies accordingly.

6.3 Implications

6.3.1 Theoretical Implications

Previous research by Chellappa and Sin (2005) exists within the field of personalization services that measures the relationship between the independent variables value for personalization, concern for privacy and trust building factors to the dependent variable likelihood of using online personalization services. However, this research contributes to the academic field by progressing Chellappa and Sin’s (2005) theoretical structure with additional theoretical perspectives and concepts. Consequently, the dependent and independent variables were thus expanded with new indicators to measure the separate variables and the model developed from the theoretical foundation was, as a result, modified to coordinate with the new theoretical structure.

On this basis, this research therefore scrutinized Chellappa and Sin’s (2005) result by re-testing the variables and hypothesis in different context of time, a more diverse population and in a different country. Considering online personalization services evolved accompanying the technology development, it is expected consumers might experience and perceive personalization services differently today in comparison to when Chellappa and Sin’s (2005) was published. As such, this research also contribute to the field of academia by demonstrating the applicability of Chellappa and Sin’s
(2005) theoretical model in a new context. This research, therefore, provide a supplementary and updated version of consumer’s likelihood of using online personalization services.

6.3.2 Managerial Implications

Practitioners and companies utilizing online personalization services can utilize the findings of this research as a foundation for managerial decisions. Having this research as a foundation, companies can understand which variables are most significant influencers on consumers’ likelihood of using online personalization services. By acknowledging these influencers, companies can implement correlating strategies which allows them to more successfully communicate with the users.

As the results indicated that value for personalization was the most significant and impactful influencer on the usage decision, it is recommended that consumers’ perceived value should be emphasized and further communicated to consumers. However, while concerns for privacy did not explain the likelihood of using online personalization services to the same extent, it was apparent that privacy concerns generally was perceived as a pertinent factor and could refrain consumers from using the services. This suggests companies should not ignore privacy concerns and solely focus on the aspect of value. Rather, companies should still actively work to ensure that personal information is treated carefully, in a credible and strategic manner.

Furthermore, while trust building factors was not found to be a significant factor for the dependent variable in this specific context, it is apparent that it is considered as an important factor to consumers. That is, trust building factors can potentially affect companies and the usage of their services in other contexts and companies should, therefore, carefully consider implementing and utilizing trust building factors. By doing so, companies would acknowledge consumers’ values and attitudes of trust building factors and could potentially result in an increased satisfaction among the consumers. If companies would both emphasize the value a consumer can acquire by using online personalization services, as well as implementing factors that build trust, companies could as a consequence potentially counteract possible influential negative factors, such as concern for privacy.
7 Limitations and Future Research

This chapter presents the limitations of this study, what could have affected the result and what could have been done differently, followed by suggestions for future research based on the findings of this study.

7.1 Limitations

Due to the time and resource limitations, the sampling approach of non-probability sampling had to be utilized which cannot fully assure statistical reliability due to the high risk of sampling errors (Bryman and Bell, 2011; Saunders, Lewis and Thornhill, 2016). If conducting a probability sampling instead, every individual of the population being studied would have an equal chance of being chosen to participate in the questionnaire (Adams, Raeside and White, 2007; May, 2011). As such, it would yield an accurately representative sample and the results of the research could thus be generalized onto the larger population (Neuman, 2003; Saunders, Lewis and Thornhill, 2016). Due to these limitations, the results of this research should not be treated as generalizable and the findings should, therefore, be further scrutinized and researched by other researcher using a generalizable sampling approach before being regarded as scientifically accurate.

Additionally, due to the limitations in gaining access to data that measures the actual usage of online personalization services, this research measures the intention to use online personalization services. This, consequently, results in a somewhat more indefinite findings, than if the actual usage would be examined, due to intentions not being an absolute signifier to an actual behavior.

7.2 Future Research

The model of this research explains approximately 60% of consumer’s likelihood of using online personalization services. Further research should, therefore, be conducted in order to find the remaining influential variables that explains the usage decision. Doing so could generate a model which explains likelihood of using online personalization services to an even greater extent. Furthermore, while trust building factors were not found to be of significance in this specific context, it was considered
important among consumers. As such, by undertaking a more thoroughly research on additional or underlying factors that build trust, there is potential that trust building factors could be a significant influential factor on the likelihood of using online personalization services. Such a research approach could be to conduct an experiment in a controlled setting where some participants are exposed to trust building factors while others are not in order to investigate if such factors actually increases the likelihood of using online personalization services.

Additionally, while further research is required to test the generalizability of the model, the model should therefore be tested on a greater number of consumers. Providing further insights in additional context would also allow these findings to be scrutinized and advanced through larger populations, which in the end would further corroborate the results. Additional research could also be conducted beyond the online context, such as personalization services in form of membership cards or credit card transactions in physical stores.

Furthermore, this research only measures the likelihood of using online personalization services of those already online shopping. As such, future research should include non-online shoppers as testing the theoretical model on such a population may yield different results, which would provide an additional understanding to the likelihood of using, or not using, online personalization services of such individuals. Similarly, conducting research which includes younger individuals could also contribute to understanding younger consumers’ relationship to online personalization as these have grown up during a digital age and may differ from those who have experienced the digital development.
References


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## Appendices
### Appendix A Operationalization - Swedish Translation

<table>
<thead>
<tr>
<th>Con1</th>
<th>Age Restriction</th>
<th>Are you 18 years or older?</th>
<th>År du 18 år eller äldre?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Con2</td>
<td>Online Purchase</td>
<td>Have you ever purchased anything on the Internet?</td>
<td>Har du någonsin handlat på internet?</td>
</tr>
</tbody>
</table>

### Table 11: Control Questions – Swedish Translation

<table>
<thead>
<tr>
<th>Like1</th>
<th>Performance Expectancy</th>
<th>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</th>
<th>I believe personalization services will be useful to me</th>
<th>Jag tror personaliseringstjänster kommer vara användbara för mig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like2</td>
<td>Effort Expectancy</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I believe personalization services will be easy to use</td>
<td>Jag tror personaliseringstjänster kommer vara enkla att använda</td>
</tr>
<tr>
<td>Like3</td>
<td>Perceived Behavioral Control</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I feel confident in my usage of personalization services</td>
<td>Jag känner mig självvårdig i mitt användande av personaliseringstjänster</td>
</tr>
<tr>
<td>Like4</td>
<td>Social Influence</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>Others speaking positively about personalization services makes me want to use personalization services</td>
<td>Att andra pratar positivt om personaliseringstjänster gör att jag vill använda personaliseringstjänster</td>
</tr>
<tr>
<td>Like5</td>
<td>Attitude</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I intend to use personalization services in the future</td>
<td>Jag avser att använda personaliseringstjänster i framtiden</td>
</tr>
</tbody>
</table>

### Table 12: Likelihood of Using Personalization – Swedish Translation

<table>
<thead>
<tr>
<th>Value1</th>
<th>Experience</th>
<th>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</th>
<th>I believe personalization services improve my usage experience</th>
<th>Jag anser att personifieringstjänster förbättrar min användarupplevelse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value2</td>
<td>Communication</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I believe personalization services improve the communication with the online vendor</td>
<td>Jag anser att personaliseringstjänster förbättrar kommunikationen med onlinebutiken</td>
</tr>
<tr>
<td>Value3</td>
<td>Relevancy</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I believe personalization services provide information relevant to my interests</td>
<td>Jag anser att personaliseringstjänster förser mig med information som är relevant till mina intressen</td>
</tr>
<tr>
<td>Value4</td>
<td>Time</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I believe using personalization services saves time</td>
<td>Jag anser att jag sparar tid genom att använda personaliseringstjänster</td>
</tr>
<tr>
<td>Value5</td>
<td>Trade-off</td>
<td>1 = Håller inte alls med 3 = Neutral 5 = Håller helt med</td>
<td>I believe personalization services are beneficial to me</td>
<td>Jag anser att personaliseringstjänster är fördelaktiga för mig</td>
</tr>
</tbody>
</table>

### Table 13: Value for Personalization – Swedish Translation
| Priv1 | Information Collection | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag är orolig att onlinebutiker samlar för mycket personlig information om mig | I am concerned that online vendors are collecting too much personal information about me |
| Priv2 | Information Usage | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag är orolig över hur personlig information som kan identifieras mig används av onlinebutiker | I am concerned about how my personal information which can identify me is used by online vendors |
| Priv3 | Unauthorized Secondary Use | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag är orolig att obehöriga har tillgång till min personliga information | I am concerned about unauthorized access to my personal information |
| Priv4 | Safety and Risk Orientation | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag tycker inte det är riskfyllt att ge ut min personliga information när jag köper något online | I do not think it is risky to provide my personal information when I buy something online - (reverse coded) |
| Priv5 | Familiarity | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag är bekväm med att ge ut personlig information till en hemsida som jag är bekant med | I am comfortable giving out information to a website that I am familiar with - (reverse coded) |

Table 14: Concern for Privacy – Swedish Translation

| Trust1 | Consumer Empowerment - Control | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag föredrar att handla från onlinebutiker som ger mig kontroll över hur min personliga information används | I prefer to purchase from online vendors that provide me with control over how my personal information is used |
| Trust2 | Consumer Empowerment - Access | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag föredrar att handla från onlinebutiker som ger mig tillgång till vilken personlig information som samlas om mig | I prefer to purchase from online vendors that provides me with access to what personal information is collected about me |
| Trust3 | Consumer Empowerment - Transparency | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag föredrar att handla från onlinebutiker som förklarar hur personaliseringstjänster är anpassade till mig | I prefer to purchase from online vendors that explain how personalization services are tailored to me |
| Trust4 | Signaling Trustworthiness - Privacy policy | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag anser att onlinebutiker som har en integritetspolicy skyddar min personliga information | I believe that online vendors who have a privacy policy protects my personal information |
| Trust5 | Signaling Trustworthiness - Third party certification / seals | 1 = Håller inte alls med | 3 = Neutral | 5 = Håller helt med | Jag känner mig mer säker att handla från onlinebutiker där de har certifiering från en obörjade tredje par som att hanteringen av personalinformation | I feel safer shopping from online vendors when they have independent third party certification regarding the handling of personal information |

Table 15: Trust Building Factors – Swedish Translation

| Add1 | Additional Question | Do you have any additional opinions you would like to share? | Vänligen fyll i nedan om du har några övriga kommentarer eller synpunkter |

Table 16: Additional Question – Swedish Translation
<table>
<thead>
<tr>
<th>Filt1</th>
<th>Man</th>
<th>Gender?</th>
<th>Kvinna</th>
<th>Kö?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kvinnan</td>
<td></td>
<td>Annat</td>
<td></td>
</tr>
</tbody>
</table>

| Filt2       | 1. 18-28       | Age?    | 2. 29-39 | Ålder? |
|            | 3. 40-50       |         | 4. 51-61 |        |
|            | 5. 62+         |         |          |        |

| Filt3       | 1. Färre än 1 gång per år | How often do you shop online? | 2. 1-6 gånger per år | Hur ofta köper du något online? |
|            | 3. 7-11 gånger per år    |                                  | 4. 12-16 gånger per år|
|            | 5. 17 eller fler gånger per år |                                      |                     |

Table 17: Control Variables – Swedish Translation
Appendix B Actual Questionnaire

Personaliseringstjänster

Var välkommen att läsa igenom denna introduktion innan du påbörjar enkäten.

Tack för att du tar din tid att delta i denna enkäten. Vi är tre studenter som skriver vår kandidatuppsats på Marknadsföringsprogrammet på Linneuniversitetet i Växjö. Syftet med denna enkät är att förstå kundens syn på personaliseringstjänster.

I denna kontext innebär personaliseringstjänster att din personliga data och information, såsom surf- och transaktionshistorik, används till att automatiskt skapa rekommendationer på onlinebutikers hemsidor.


Enkäten tar max 10 minuter att besvara. Dina svar är anonyma och kommer behandlas konfidentiellt.

Tack för ditt deltagande!

Avesta Dilliw - ad222ks@student.linu.se
Christopher Ullberg - cu222ax@student.linu.se
Johanna Jevinger - jj222tp@student.linu.se

Ar du 18 år eller äldre? *

- [ ] Ja
- [ ] Nej

NEXT
Personaliseringstjänster

* Required

Har du någonsin handlat på internet? *

〇 Ja
〇 Nej

Personaliseringstjänster innebär att din personliga data och information, såsom surf- och transaktionshistorik, används till att automatiskt skapa rekommendationer på onlinebutikers hemsidor.


Jag tror personaliseringstjänster kommer vara användbara för mig *

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>

Håller inte alls med

Håller helt med

Jag tror personaliseringstjänster kommer vara enkla att använda *

<table>
<thead>
<tr>
<th>1</th>
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Håller inte alls med

Håller helt med

Jag känner mig självsäker i mitt användande av personaliseringstjänster *

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Håller inte alls med

Håller helt med
Att andra pratar positivt om personaliseringstjänster gör att jag vill använda personaliseringstjänster *

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Jag avser att använda personaliseringstjänster i framtiden *

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BACK    NEXT
Personaliseringstjänster

* Required

Personaliseringstjänster innebär att din personliga data och information, såsom surf- och transaktionshistorik, används till att automatiskt skapa rekommendationer på onlinebutikers hemsidor.


Jag anser att personaliseringstjänster förbättrar min användarupplevelse *

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Jag anser att personaliseringstjänster förbättrar kommunikationen med onlinebutiken *

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Jag anser att personaliseringstjänster förser mig med information som är relevant till mina intressen *

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Jag anser att jag sparar tid genom att använda personaliseringstjänster *

1 2 3 4 5

Håller inte alls med Håller helt med

Jag anser att personaliseringstjänster är fördelaktiga för mig *

1 2 3 4 5

Håller inte alls med Håller helt med

BACK NEXT
Personaliseringstjänster

* Required

Jag är orolig att onlinebutiker samlar för mycket personlig information om mig *

1 2 3 4 5

Håller inte alls med

Håller helt med

Jag är orolig över hur personlig information som kan identifiera mig används av onlinebutiker *

1 2 3 4 5

Håller inte alls med

Håller helt med

Jag är orolig att obehöriga har tillgång till min personliga information *

1 2 3 4 5

Håller inte alls med

Håller helt med

Jag tycker inte det är riskfyllt att ge ut min personliga information när jag köper något online *

1 2 3 4 5

Håller inte alls med

Håller helt med

Jag är bekväm med att ge ut personlig information till en hemsida som jag är bekant med *

1 2 3 4 5

Håller inte alls med

Håller helt med

BACK   NEXT
Personaliseringstjänster

* Required

Jag föredrar att handla från onlinebutiker som ger mig kontroll över hur min personliga information används *

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Jag föredrar att handla från onlinebutiker som ger mig tillgång till vilken personlig information som samlas om mig *

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Jag föredrar att handla från onlinebutiker som förklarar hur personaliseringstjänster är anpassade till mig *

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Jag anser att onlinebutiker som har en integritetspolicy skyddar min personliga information *

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Jag känner mig mer säker att handla från onlinebutiker när de har certifiering från en oberoende tredje part angående hanteringen av personlig information *

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Personaliseringstjänster

Vänligen fyll i nedan om du har några övriga kommentarer eller synpunkter

Your answer

Kön? *
- Man
- Kvinna
- Annat

Ålder? *
- 18-28
- 29-39
- 40-50
- 51-61
- 62+
Hur ofta köper du något online? *

- Färre än 1 gång per år
- 1-6 gånger per år
- 7-11 gånger per år
- 12-16 gånger per år
- 17 eller fler gånger per år

Personaliseringstjänster

Tack för din medverkan!