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Digital Marketing (Skaitmeninė rinkodara)

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MAGISTRO BAIGIAMASIS DARBAS

The Impact of Brand Image, perceived Price, perceived Quality on Consumer Intention to buy Nord VPN.	Prekės ženklo įvaizdžio, suvokiamos kainos ir suvokiamos kokybės poveikis vartotojų sprendimui pirkti Nord VPN produktą.
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Summary

The aim of this master's thesis paper is to analyze the influence of brand image, price perception, quality perception, perceived privacy risk and effectiveness of privacy policy and on consumer intention to buy Nord VPN by using relevant academic research. After analyzing the relevant literature, a conceptual research model is created alongside with suggested hypotheses to test the relationships between the variables. The research uses a quantitative data approach, where the collection of data is done via an online survey. The online survey was conducted in English language, and the responses were collected using a convenience sampling method, by sharing it on social media platforms online to an audience of 20 to 35+ year old respondents, including respondents from outside of Lithuania. The survey collected a total of 337 responses, which were analyzed using the SPSS statistics analysis program, to test the reliability of the results, as well as their correlation and relationship between each other. The results of this research show an interaction between 6 variables: brand image, perceived price, perceived quality, perceived privacy risk, perceived effectiveness of privacy policy and intention to buy. The research detected that there is a direct influence of brand image, perceived quality, and perceived effectiveness of privacy policy on consumer intention to buy Nord VPN. The paper also provides recommendations for further academic research and suggestions for marketers working within the field of cybersecurity.

Santrauka

Šio magistrinio darbo tikslas yra išanalizuoti prekės ženklo įvaizdžio, suvokiamos kainos ir suvokiamos kokybės poveikį vartotojų sprendimui pirkti Nord VPN produktą remiantis teoriniais ir praktiniais aspektais. Remiantis atlikta mokslinės literatūros šaltinių analize, buvo sukurtas konceptualus tyrimo modelis, kuriame pateikiamos rekomenduojamos hipotezės ryšiui tarp nustatytų kintamųjų testavimui. Šis tyrimas yra paremtas kiekybiniu duomenų analizės tipu, kai duomenų rinkimo procesui buvo naudojama internetinė apklausa. Ši apklausa buvo vykdyta anglų kalba, kuria pasidalinta įvairiuose socialiniuose tinkluose, naudojant proginės imties metodą. Tyrimui atlikti buvo duomenys renkami iš 20-35+ amžiaus grupės respondentų įskaitant atsakymus ir ne iš Lietuvos valstybės. Iš viso duomenų rinkimo metu buvo surinkta 337 atsakymai. Šių atsakymų analizei, kintamųjų validumui ir tarpusavio koreliacijai tirti buvo naudojama SPSS statistikos analizės programa. Po atliktos analizės, tyrimo rezultatai parodė ryšį tarp 6 kintamųjų: prekės įvaizdžio, suvokiamos kainos, suvokiamos kokybės, suvokiamo asmeninio internetinio privatumo žala, suvokiamos privatumo taisyklių efektyvumas, bei vartotojų sprendimas pirkti. Tyrimo rezultatai parodė teigiamą įtaką tarp prekės ženklo, suvokiamos kokybės, bei suvokiamo privatumo taisyklių efektyvumo įtaką sprendimui pirkti. Šiame magistro darbe taip pat pateikiamos atitinkamos rekomendacijos bei pasiūlymai tolimesniems tyrimams bei rinkodaros specialistams dirbantiems kibernetinio saugumo sektoriuje.

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Introduction

Due to the increased reliance on information and technology in modern-day businesses, brand image has become increasingly more vulnerable to many sophisticated threats (Alshaikh, 2020). Some of those threats involve user private information attacks or more often called “cyber – attacks”. In 2020, The World Economic Forum named cyber-attacks as one of the top five biggest risks to the global stability. The constantly evolving cybercrime has become more sophisticated and much more damaging than ever before. Nowadays companies are investing more time in building security protocols which would be more organized against highly damaging cyber-attacks (Chikada, 2019). These so-called cyber-attacks result in not only monetary loss of money or data, but the loss of customer trust and brands reputation which in turn causes a negative impact on the brand image and negatively affects the consumers intention to buy. New consumers are influenced by more than just the price, quality, or brand image, they also want their privacy to always be stored safely.

While there has been much research done about the importance of brand image, price, and quality perception of various products in different markets, and stores, there is a significant gap of research done in the cyber-security sector. Several studies such as Chikada (2019), Alshakih (2020) as well as Sen and Borle (2015) and Wang (2019) have presented the importance of cybersecurity culture and its monetary effect on brand image, however none have presented clear research about how exactly such factors can influence the mind of the consumer and their purchasing decision towards different products and services which have been negatively afflicted by cyber related threats.

To begin with, it is important to understand that the consumer purchasing decision is a part of a consumer behavior process, which can be defined as the process of activities that people engage in when searching for different products, purchasing, or evaluating their quality to fit their needs (Belch and Belch, 2018). These decisions are influenced by the desire of a consumer to purchase a specific product or service through a certain distribution channel whether it is a website or a physical store. Previous research done indicates that the brand image, price, trust, and value are driving forces of online purchasing decisions in various retail and online

stores (Lien et al., 2015). Study done by Wang (2019) found out that external information sources affect users' perceptions towards privacy products, with significant focus on privacy and only indirect effect of the brand image of the products itself. In terms of the cybersecurity sector, there is a significant gap in research on how exactly these variables influence the consumer intentions to purchase a specific product, however based on the various research done in the field involving other products, cybersecurity or user privacy in general should be considered as an important variable towards consumer purchasing decision making process.

Researchers frequently argue that the brand image together with price and quality perception are responsible for a major shift in consumer purchasing decision making. Based on a variety of studies done by authors such as Witama and Keni (2019), Wang and Hariandja (2016), Twomey et al., (2011) it is noted that consumers are more often choosing products based on the emotional characteristics of the products, as they choose the products that represent their ideals and opinions the most. Large variety of offerings are now becoming similar in technological and physical aspects. Small differentiation between products is pushing consumer focus towards the brand image and the price and quality of the product before a purchase decision is made (Witama and Keni, 2019). Corporations and companies around the globe are investing more time into developing their brand image to influence the consumer purchasing decision in their own favor. (Wang and Hariandja, 2016). A well-established company or organization will be able to easily introduce new products and experiments by relying on the trust built by their brand image (Twomey et al., 2011). Increasing reliance on security has become a significant part of developing the brand image itself for corporations that wish to sell their products. It is also important to mention that premium price and quality perception are directly created by the brand image itself (Diallo et al., 2013), meaning that some products are perceived as high price and quality solely based on the brands image, which will in turn influence the purchasing decision in a positive way for certain products.

It should be mentioned that the digital goods and products that are being sold in the market today are in a completely different niche. As present-day internet users value the trust, reliability, and safety of their privacy more than anything else (Chikada, 2019). When dealing with products that collect their data and privacy online, users make their choices based on opinion and reviews, additionally to the usual comparison between price and quality (Sen and Borle, 2015). Subsequently, when doing their

shopping, customers tend to compare the prices between different alternatives and form their perceptions of the price, leaving certain aspects of the product behind (Kim et al., 2012). While various research has been done about product pricing, Roediger et al. (2016), discovered that the competitive price of a product has a significant and positive influence on purchasing decisions, however not enough research has been done in terms of how safety of their private information by the brand is viewed by the consumer.

Evidently, quality and price perception are two critical elements in consumer decision making process. Consumers will compare the quality of alternatives in the same way they compare the price within the specific category (Diallo, 2012). Quality perception is defined as the consumers judgement about the product's overall quality and advantage. According to Kotler and Keller (2015), quality is the total feature and characteristics of a product or service that is dependent on the ability to satisfy the needs of a customer either implicitly or explicitly.

While there has been a significant amount of research done regarding the influence of brand image and price and quality perception on purchasing decision making for various products, very limited amount of research has been done in relation to user privacy for digital products. Each of the elements discussed have a different influence towards consumers purchasing decision. The aim of the study is to develop a research that will provide meaningful and useful information for future researchers, as well as provide more information about the relationship between the aforementioned factors and the products that rely on storing sensitive information in order to develop their products.

Relevance of the topic.

While there has been much research done about the importance of brand image, price and quality perception of various products in different markets, there is a clear lack of such research done about perceived user privacy risk and perceived effectiveness of privacy policy, and how it relates to consumers intentions to buy. Several studies have presented the importance of cybersecurity culture itself, it's monetary effect on brand image, however none have presented a clear research about how exactly it can affect products that have recently had a privacy leak or bad cyber security tactics.

As brand image with price and quality perception are responsible for a major shift in consumer purchasing decision, the products and services are becoming more similar in technological and physical aspects. This small differentiation is pushing consumers to focus more on the brand image and the perceived price and quality of the product before purchase. Nowadays, corporations and companies around the globe are investing more time into developing a good brand strategy in the minds of the consumers to create a good product. Various strategies are used to develop a brand, from marketing tactics as brand image can reduce the negative effects of other mediums (Wang and Hariandja, 2016). Study done by Wang (2019) found out that external information sources affect users' perceptions towards privacy products, with significant focus on privacy and only indirect effect of the brand image of the products itself.

Finally, brand image is formed directly with the brand identity itself. A well-established brand will be able to easily introduce new products and experiments by relying on the trust built by the brand image itself (Macguire, 2006 p.1). The success of a brand is dependent on the right choice of brand identity. Based on the brand image, a specific price perception is formed by the consumer. A good brand image will create a positive effect on the perception of the price and the quality of the products and services sold by various companies (Kotler and Armstrong, 2016). The product or service does not have to always be superior in this case, as the brand image and consumers' perception of the product is enough to differentiate themselves from the competitors. Premium price and quality perception is directly created by the brand image itself (Rodiger et al., 2016).

Statements of the problem:

How does the impact of brand image, perceived price and perceived quality of products and services in regards to user privacy influence the consumer purchasing decision.

Research question.

The central question of the research is the following: what impact the safety of user privacy has on consumer purchase decision making, considering the involvement of brand image, price perception and quality perception as the key factors?

Goal of the research

The goal of this research is to present a research model which analyzes the impact that the safety of user privacy has on consumer purchase decision making while also considering the involvement of brand image, price perception and quality perception as key factors.

Objectives of the thesis.

1. To theoretically analyze the brand image, price, quality perception and perceived user privacy elements and to empirically test it.

2. Examine the relationship between brand image, price perception and quality perception and user privacy based on literature review as a reference.

3. Based on theoretical literature review, prepare a conceptual model that will analyze the relationships between brand image, perceived price, perceived quality, and user privacy towards consumer intention to buy.

4. To conduct empirical research to gain more insights about the hypothesized relationships between consumer intention to buy, brand image, price perception, quality perception and perceived user privacy risk and effectiveness of privacy policy.

5. To present the empirical findings that will enhance the understanding of the relationship between brand image, cybersecurity, price, and quality perception as well as consumer purchase intention.

6. To present theoretical aspects of how perceived user privacy safety affects consumers intention to purchase.

Research Design

This study applies the quantitative research design. The design was chosen due to the need to test out the hypotheses and examine relationships between different variables (Malhotra, 2007). Quantitative design research also allows to make inferences within the sample population. Most importantly, quantitative research design ensures that the findings of the study are generalized and reliable (Conrad & Serlin, 2011).

Sequence of the thesis

This scientific paper consists of three parts:

1. Theoretical part. Which includes the following sections:

1.1 Theoretical framework. This section will examine the academic literature and studies conducted by various researchers in the marketing field on: brand image, price perception, quality perception, cybersecurity and consumer purchasing decision.

2. Methodology Which includes the following sections:

2.1 Research Methodology. In this part the paper analyses the conceptual model as well as hypotheses and their links between them. The following links presented in this part will be tested via quantitative research method. A survey or questionnaire method will be used in order to gather primary data.

2.2 Empirical Research. This section of the paper will present the statistics of the data gathered from the quantitative research method discussed in the methodology chapter. The validity and reliability of this data will be considered and tested on the hypotheses.

3. Discussion of findings and conclusion. This section will include the following:

3.1 Discussion of the findings. The following section of the study will present the findings of the empirical research, it's contribution towards academic literature and managerial field of the study as well as the limits of the study and recommendations for future research will be presented.

3.2 Implication of the study and recommendations. This section will elaborate more on the usefulness of this research towards academic and business literature as well cover any recommendations for future research based on the findings of the study.

3.3 Conclusion. The final part of the study will provide the total sum up of the paper, the findings of the conducted research, discussion of limitations and recommendations.

1. The Impact of Brand Image, Perceived Price, Perceived Quality on Consumer Intention to Buy a Cybersecurity product theoretical framework

The following chapter of this thesis presents the literature review and findings from various literature and research regarding brand image, price perception, quality perception, general trends within the cybersecurity sector, user privacy risk and consumer perception as well as influences on consumer intention to buy.

In the following part, the main concepts and aspects of brand image, price and quality perception will be presented and discussed in retrospect to the consumer purchase decision making process. Several key factors and models will be analyzed to understand the bigger picture and deeper meaning of what the driving force towards a consumer is purchasing decision. Furthermore, the importance of user privacy will be analyzed for today's product and marketing environment.

The goal of this study is to determine the effect of brand image, price perception, and quality perception on consumer intention to buy a cybersecurity product. The results of this study are expected to provide information to the cybersecurity product companies about how to improve customer perception of the product and boost sales by using brand image factors, perceived price, and service quality.

1.1 Consumer Intention to Buy

The following section will cover the literature in terms of definition of consumer intention to buy and key trends and frameworks.

1.1.1 Defining the key aspects that influence the consumer intention to buy.

According to Foster (2016), different motives influence the consumer intention to buy a product or service. One of the key factors is the brand image, which can be considered completely subjective as said by (Cham, et al., 2017). The brand perception of the customer is influenced by brand image, their perceived price and perceived quality of the product or service, which in subsequently influences their intention to buy. Based on the research done by Sayed (2017), it is stated that customers will be satisfied with a good service, friendly staff, and a comfortable place, which helps forming a brand image which is embedded in the mind of the

consumer. Based on the research done by Witama and Keni (2019), it is stated that there is an influence given by the perceived price to the satisfaction of the customer. It shows that the better the price perception perceived by the customer is, the higher the customer satisfaction will be. Customer satisfaction increases their intention to buy accordingly. Furthermore, So, et al., (2013) suggest that the service quality itself also has a significant influence on customer satisfaction and could be considered as an influence towards intention to buy.

Consumer intention to buy has been one of the principal topics examined in various marketing literature, researchers are highly interested in analyzing what influences consumer intentions and how can it be predicted in our current day market (Dam, 2020). Kotler and Armstrong (2016) explain that the consumer intention to buy is a step in the buyer 's decision making process, during which consumers actually purchase a product. On the other hand, Peter and Olson (2010) defined the intention to buy as an integrated process that is undertaken in order to combine the knowledge and to evaluate the alternatives, and choose one of them, so that the purchasing decision can be evaluated as the determination of the consumers choice towards the alternatives that fulfill their needs. From another point of view, the purchase intention can be considered as a selection of an option from the alternative choices (Dam, 2020). At this stage, the consumers pay for products that they need or desire, after passing several evaluation processes. A big factor in this process is the influence of the number of people that had an involvement in the purchasing decision. The most widely used model to analyze intention to buy can be seen in Table 1. The model discovered that the consumers intention to buy has a process that influence their decision. It begins with the (1) problem recognition, then there's a phase of (2) information search and (3) evaluation of alternatives. The comes the actual (4) purchase decision followed by (5) post-purchase behavior.

Table 1. Purchase decision process

Purchase decision process
1. Problem recognition
2. Information search
3. Alternative evaluation
4. Purchase decision
5. Post-purchase behavior

(Based on: Schiffman and Kanuk (2010))

Based on research done by Schiffman and Kanuk (2010), a decision is the selection of a choice from two or more alternatives and for someone to make the right choice there must always be an option for an alternative. Consumer buying decision is influenced by the buying intention, which reflects the desire of a consumer to purchase a specific product or service through a certain distribution channel, whether it is a website or a retail store. Previous research done indicates that the brand image, price, trust, and value are driving forces of online purchasing decisions Diallo, (2012) Furthermore, consumers seem to look for external information sources before making their purchasing decisions of a product that is difficult to evaluate or which consumers are not familiar with (Wang, 2019).

1.1.2 Brand image, Perceived Price, Perceived Quality, and Intention to buy

Consumer buying behaviour can be influenced by a variety of different factors that may not be completely dependent on the brand, company or organization that is selling their product or service (Saleem et al., 2015). The consumer intention to buy is always influenced by their own social norms and preferences, and as discussed previously, they follow a purchase decision process (see Table 1.). However, there are a few factors that do influence consumer intention to buy and which can be controlled by the company or brand itself.

Based on consumer beliefs, a positive correlation exists between the price and quality (Chi et al., 2009). The buyers in a retail store tend to use price as an index of the actual product quality, and vice versa, assumptions are made that the higher the price or quality of the product is, so is the retailer or brand (Yoon, Oh, Song, Kim & Kim, 2014). The perceived price and quality relationships indicates the moderating effect of a store image and can be caused by a perceived level of the price, given by the retailer. Researchers such as Wu (2007) suggest that by increasing the consumer perception of the price and quality will also increase their decision to purchase a product. Furthermore, it is assisted by research done by Saleem et al., (2015), that perceived quality and perceived price have direct influence on the consumer intention to buy.

Brand image and brand awareness could also be considered as an important factor towards consumer intention to buy (Chi et al., 2009). Consumer purchase intention could be higher, depending on the consumers familiarity with the brand and overall, the brand image of the product. It can be said that the customer purchase decision can be sped up and facilitated

by services that have a positive image, which are special and important for an individual. A positive brand image with good product quality will help in assisting consumers to make a choice and make them feel comfortable when purchasing a product (Chih – Chung et al., 2012).

Consumer purchase intention is an important factor for brands, companies, and service providers. Understanding the consumers intention to buy can help companies to better understand their markets, update, re-adjust their offerings and in turn boost their sales and profit (Agmeka et al. 2019).

1.2 Cybersecurity and User Privacy awareness

The following section will present the research about what cybersecurity is the main threats that arise in the cybersecurity sectors as well as what is the importance of user privacy towards brand image and consumers' general awareness of their privacy and how their data is being stored and used by various companies.

1.2.1 Defining Cyber Security Threats

As Internet usage began an exponential growth as well as the rise of e-commerce with it, the concerns over online privacy protection have also begun to rise. Based on The World Economic Forums' (2020) report, more than 50% of the world's population are online, with approximately one million people going online for the first time each day. It is measured, that now, only one third of world's population does not own a mobile device. The digital technology is constantly bringing great benefits in the economic and societal levels, however, the lack of global care for technology governance and cyber security poses great global risks. The possibility of a divided cyberspace poses a high threat to the generations to come from reaching their full potential (Global Risk Report, 2020). The cybersecurity level threats have made brand protection much more significant in recent years. Brands have shifted their focus towards protecting their customers and their sensitive data from exposure to cyber-attacks thus improving their brand image in terms of how user privacy is handled (Chikada, 2019).

Nowadays, innovative products rely on personal information of the user to be able to fully deploy their value (Miltgen et al. 2016). Personal information of the user must be collected to efficiently process transactions of the website, as well as to improve the effectiveness of the marketing campaigns (Premazzi et al. 2014). These various companies and their websites request the user to register in their database by providing sensitive personal information before they can participate in any online activities for

example browsing free content of the website (Bandyopadhyay, 2013) However, some of the internet users may not feel completely confident about providing personal information online, as it involves the disclosure of the aforementioned sensitive private information, as well as their browsing habits which possibly threaten their personal security (Shareef, et al. 2013; Bandyopadhyay, 2013).

Cybersecurity and user privacy risk is related to various online activities, which have the potential of private and sensitive information loss when unauthorized individuals gain access to it (Jeong, Zhao and Khouja, 2012). Invasion of online privacy can be defined as an unauthorized or illegal collection of personal pieces of information (Bandyopadhyay, 2013). The perception of user privacy can be defined as the extent to which the users perceive that their privacy may be leaked and used against them during their online activities, for example the sensitive information being shared and/or disclosed to individuals and website with whom the user has no intention to share (Wang, 2019). Therefore, privacy risk is one of the key considerations for many internet users, if they have any sense that their privacy may be at risk, this may lead to the visitors giving away false information on the website or even a decision to completely refuse registering to the website, which in turn causes negative effect of the website performance and the company's' image (Wang, 2019). In order to protect their websites performance and their brand image in terms of user's privacy, businesses must develop an effective strategy to reduce the cyber security risk and have a positive increase towards the user's perception of privacy (Miltgen et Al. 2016).

Due to the importance of users' data in online businesses, especially e-commerce websites, improving the user's privacy perception in relation to their brand is one of the most important factors for current day marketers (Wang, 2019). Several researchers define user privacy in a different way, Table 2 below sums up the perspectives of different researchers and their ideas of what user privacy is.

Table 2. Researcher perspectives of user privacy.

No.	Author	Source	Perspective
1.	Miltgen et al. 2016	Introducing new products that affect consumer privacy	User privacy concerns influence the introduction of potentially privacy invading technologies
2.	Wang, 2019.	Effects of Brand Awareness and Social Norms On User Perceived Cyber Privacy Risk.	Social norms negatively influence perceived cyber privacy risk
3.	Premazzi eta al. 2014	Customer Information Sharing with E-Vendors	Consumer's willingness to disclose personal data is based on their assessments of related costs, risks and benefits.
4.	Bandyopadhyay, 2013	Predicting Consumer Reaction to online Privacy Concerns	Consumers perceive a risk when they are concerned about their online information privacy

Note: Prepared by the author of the thesis.

To conclude, although variety of research shows different perspectives on what user privacy is, the consensus can be considered that user privacy is something that consumers are concerned about, especially when it involves the use of their personal information.

1.2.2 Cybersecurity's influence on Brand Image

There are a growing amounts of various cybersecurity threats. One type of threats are data-breaches, which can be defined as a „unauthorized access to sensitive, protected or confidential data resulting in the compromise or potential compromise of confidentiality, integrity and availability of the affected data“ (Sen and Borle, 2015, p. 1). The

consequences of such attacks are far greater than imagined, partly because of how poorly they are understood (Borum et al., 2015). Researchers are focusing more on the technological aspect of cyber threats rather than the human dimension.

Based on the research done by (Whitler & Farris, 2017) it was estimated that the average cost paid for the loss of one single stolen data record stands at 158 U.S Dollars, which would result in more than 1 billion U.S Dollars for a larger scale breach. One of the best examples of such large-scaled data-breach would be the 2013 “Target” breach (Whitler & Farris, 2017). Target is a retail corporation, and the eight largest retailers in the United States. The 2013 breach cost Target a \$100 million investment in its’ security upgrades as well as more than \$100 million in settlements for various affected U.S banks, credit-card companies and customers who needed reimbursement of the lost data (Manworren et al., 2016). What this large sum was unaccounted for, however, was the loss of reputation, and the impact it had on the short-term and long-term brand image of Target. The failure to prevent a data breach is one type of issue, though, the brands’ ability correctly or incorrectly handle the aftermath will have an even greater impact on customer purchase decision (Whitler & Farris, 2017, Chikada, 2019). This breach, however, was not the only one in recent memory, however it has helped to acknowledge the importance of user privacy for other brands, who in turn began a process of upgrading their databases. A further study done by Wang (2019), examined that private online information collected by various online businesses also influence the users concerns over their privacy rights which in turn negatively affect their perception of the brand.

1.2.3 Perceived Effectiveness of Privacy Policy

Many of today’s organizations and institutions within variety of industries, government bodies and within the academic world are working in very unpredictable and unstable cybersecurity environments (Scala, Reilly, Goethals & Cukier, 2019). The dangers begin from simply connecting to a network. According to the report of Symantec Enterprise, (2020) in 2020 alone, 76% of the study’s respondents were identifying the shortage of cybersecurity skills within their organization. This means, that almost every mid to high-level organization is prone to more and more sophisticated cyber-attacks. Furthermore, based on Symantec Enterprise (2020) 60% of cybersecurity incidents and data leaks were caused by employees who were ready to leave their jobs in the foreseeable future. Such damage affected not only their co-workers, but the consumers as well.

What is more, cybersecurity is a complex problem that companies have a low understanding of (Scala et al. 2019), and therefore are not able to react in time to minimize the damage by the cyber-crime. It was identified by IBM in its annual cybersecurity study of 383 organizations, that the average time to discover a breach of cybersecurity was 200 days (Ponemon Institute, 2016) and even when these incidents were discovered, companies and organizations became hesitant to share such information publicly, due to fear of damaging the brands' reputation and image which in turn creates a lack of awareness for other brands.

Furthermore, government regulation has an impact on all domains of everyday life, as formal and informal institutions are shaping the behavior of consumers and businesses (Henderson, 2015). The enforcement of privacy laws has become a big concern in today's digital world. There is a growing worry about online privacy and the handling of user data.

Previous studies done by Malandrino et al., (2013) indicate that internet users often have inadequate knowledge and resources on how to protect their private data and thus they rely solely on institutional laws and regulations, which have been found to reduce consumer related privacy concerns. A research done by (Malandrino and Scarano, 2013) have found out that internet users who perceive regulation to be effective are in turn, less likely to be concerned about their online privacy. It has been noted that the older the customer, the more concerned they are about their online privacy, which could be related to a lack of understanding and available information about different levels of user privacy and what steps should be taken to make it more secure (Škrinjarić et al., 2019).

On the other hand, breaches in privacy protection of data which are collected and used by government agencies could irreversibly undermine public confidence in the regulatory structure. GDPR is expected to have a significant influence on businesses, but it is too early to say whether it will change citizens', consumers', and internet users' attitudes.

To sum up, cybersecurity is an important practice that often times is overlooked by a wide majority of businesses, in turn causing damage to the brand and the company, which could have been avoided by applying cybersecurity strategies, that otherwise would not damage their reputation if a potential privacy leak happened, as users are extremely sensitive to such

exposure, and the image of the brand and its' perception could be ruined overnight.

1.2.4 User Privacy Awareness

Internet users are generating and disclosing an ever-growing amount of sensitive data, often without any awareness of what is being stored and how it can be used against them (Malandarino et al., 2013). As the importance of online communication is rapidly growing, enhancing user privacy protection is becoming a critical issue. The amount of sensitive financial, medical, and family data that is being leaked is causing users to develop a privacy awareness towards specific products.

Privacy awareness can be defined by asking four different questions: "Who is tracking my data?", "When is the data collected?", "What information do others receive?" and "How is the data processed and built for further use?". Although the efficiency and complexity of data collection methods is rapidly growing for various advertising and marketing purposes, the privacy awareness of the user is growing slowly, and often times internet users lack knowledge about all the up-to-date ways that their privacy can be breached (Malandrino et al., 2013). Tracking an individual's online activities is not a dangerous or illegal practice because it improves the effectiveness and revenue of marketing campaigns; however, the data collected could be used by third-parties for activities that are "malicious" and illegal, rather than what it was intended for. Research done by Malandrino, Scarano and Spinelli, (2013) has shown that when internet users are educated on how their private online data is being stored and how it can be used against them, have shown willingness to change their browsing habits and also educate others on the dangers of privacy leakage. It is important to note, that the study was made on mostly 20–30-year-old students, who are significantly more exposed to the internet than the older generations, and their habits may be completely different, due to different level of education about the digital environment. It could be said that with more exposed information about privacy data, consumers purchase intention of a specific product may be influenced negatively.

1.2.5 Perceived Cyber-Privacy risk.

Perceived Cyber-Privacy risk can be identified as the uncertainty that is associated with the negative consequences of using a particular product or service that involves any potential losses that may result in disclosing personal information (Zhou,2012). The perceived risk of

potential losses may and perceived trust in the product, can influence the consumers intention to buy. Further studies done by Zhou (2015) have also identified that the perceived regulatory effectiveness has an influence on perceived cyber privacy risk. According to Bandyopadhyay (2013) consumers feel at risk whenever they are concerned about online information privacy. If the concern about users' online privacy is increased, it could result in consumers declining to give out their information online or provide false information or complete rejection of -ecommerce as well as minimizing the use of internet.

Zhou, (2015) has identified that the indicated perceived cyber privacy risk is negatively associated with disclosure of personal information to service providers that are using Location based services (LBS), which track users' real-time location in order to accurately display the necessary information. LBS are also used by many of today's top Cybersecurity products such as VPN's. Other studies such as Wang (2019) have suggested that a trust in a brand or a product can outweigh the privacy risk and concerns associated with the product. Another study, done by Premazzi et al. (2014) has found out that companies who offer monetary incentives such as gifts or direct payments for users that are willing to provide their personal information have received negative influence on their brand image and trustworthiness given the fact that they were already somewhat trusted. This shows that users are very sensitive to disclosing their personal information when they are actively offered a gift or monetary payment.

1.3 Brand Image

The following part will cover the literature review analysis for brand image, it's impact on company perception and its' relationship with the consumer.

1.3.1 Defining Brand Image

One of the most widely studied topic within the marketing field is brand image and its' influence towards consumer perception. Kompella (2014), states that people are more loyal and willing to pay extra for brands that they trust. It is also said that the most important question of a brand is „How does it make them (the customer) feel?“ it also helps to understand the truth about branding, which is that brands are about feelings and not facts, and why some brands are a step-ahead compared to their competitors in the market. Based on research done by (Bahari et al., 2020), within a business context brand image plays an important role as it can influence

subjective perceptions and consumer behavior before making a purchase. The behavioral intent of the consumer is derived from the attitude towards the behavior and subjective norms.

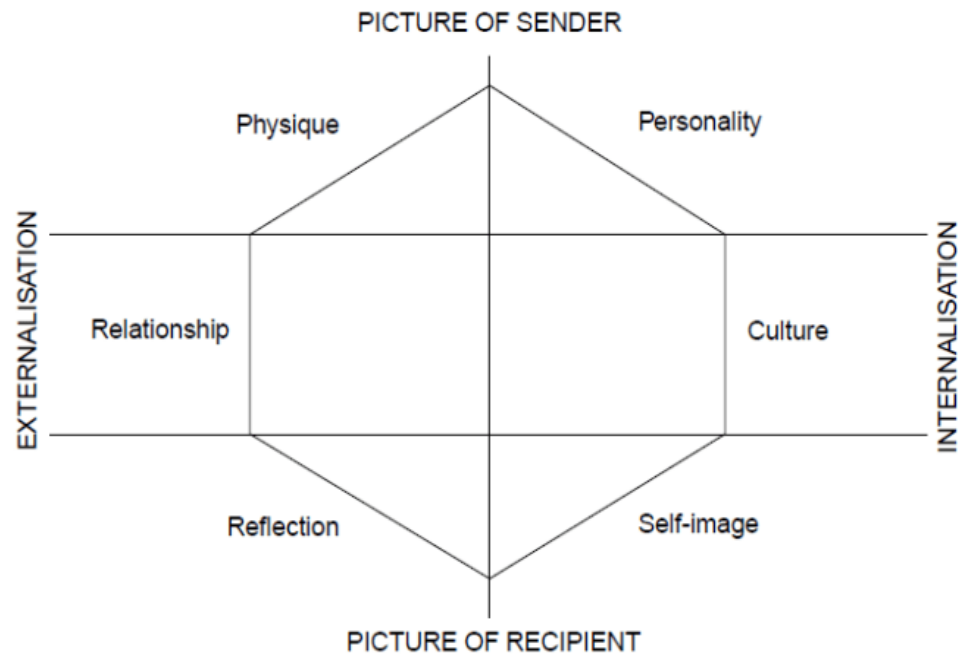
According to Kotler and Keller (2015), the brand can be differentiated by a variety of different ways: from their logos, names, symbols, or designs. These tools are there to help customers to differentiate one brand or seller from another and stand out of the competition (Kotler and Keller, 2015). Brand itself helps to distinguish the difference between the same products from a different company. However, according to Kotler and Armstrong, (2016), brand consists of more than just a name or a symbol, it is also the way consumer perceives the company and its' values, with many consumers forming an emotional reaction to a brand. Brand image is created from a variety of different aspects:

1. **Brand trustworthiness** – Consumers like to use products from brand they trust (Wang and Yang, 2010). A good brand image consists of the brand's trust worthiness, which makes consumers believe in their products and quality of their choice. When consumers have a positive attitude towards a brand, they also have an increased trust in the brands products and services (Kotler and Keller, 2015). Increased trust boosts the quality perception of the brand as well.
2. **Brand value** – Can be described as either the direct and real value of the brand towards business or as the perceived brand value from the consumer (Wang and Yang, 2010). The following is described as the consumers rating of what benefits does the brand bring for the price/value of a product or service.
3. **Brand uniqueness** – Uniqueness of a brand is the ability for it to be distinguished from other brands. The brand has clear attributes that allows consumers to form a unique impression about the brands product and be able to differentiate it from the competitors. Uniqueness can be the appearance, name of the brand or the elements of the product itself (Fadilah et al., 2018). A unique brand's products can be easily recognized by its consumers over other brands.

1.3.2 Theoretical framework - Brand Identity Prism

To understand the concept of what brand image is, we can refer to the research done by Kapferer (2012) and the developed Brand Identity Prism (Figure 1):

Figure 1. Brand Identity Prism



(Based on: Kapferer, 2012)

Based on the studies done by Chikada (2019), it is important to note that cyber-security threats such as data breaches also an important factor towards the perceptions of brand trust. What is more, the response of companies and corporations to the attack have a major influence towards consumer behavior as well. A slow, unorganized approach, deniability, and no accountability or forced communication could all effect the brand image in a negative way (Twomey et Al., 2011).

Barreda et al. (2015) States that brand image can be considered as perceptions about the brand that are reflected by the brands associations which are held in the memory of the consumer. Brand association has different levels of strenght and the link to the brand will be stronger if it is based on the consumers 'experience or exposure to communications (Aaker, 1991 as referenced by Barreda et al. 2015). We can classify brand association into three different categories: a) attributes, b) benefits and c) attitudes. These associations can vary depending on the favorability, strength and uniqueness of the brand (Kotler and Keller, 2016). The more favorable the brand image is, the more positive the attitutte towards their products and attributes will be (Aghekyan-Simonian et al., 2012). Brand image aids a

consumer in recognizing their needs and wants in regards to the brand, and also helps to distinguish the brand from their competitors (Anwar, Gulzar, Sohail, & Akram, 2011).

Kotler and Armstrong (2016) state that a brand identity for the seller or manufacturer of a product or service is a complex symbol that can convey up to six levels of understanding:

Table 3 The six levels of understanding brand image

Variable	Level of understanding
Attributes	The number of different attributes that the products provide to the consumer.
Benefits	Can be translated to both functional and emotional.
Value	How the brand says something about the value of the manufacturer.
Culture	How a brand can symbolize a specific culture or represent it.
Personality	How a brand can reflect certain personalities and attract them as consumers.
User	Brands have certain types of users that use the product, that are widely different from other brands.

(Based on: Kotler and Armstrong, 2016)

During an extensive literature review for this topic, it has been noted that many researchers have done their work on brand image and have created different definitions for what a brand image is. While the wording may be different, it is clear, that the importance of a brand as an asset is tremendous for any organization as well as the consumers. To develop a brand image or name is one step towards creating a great product, however as mentioned in the cybersecurity research part of the paper, brands should also dedicate time towards protecting their brand from outside events such as cyber-attacks. In sum, brand image and brand ambassadors play an important role towards building and influencing the success of the brand in consumers eyes. By building a successful brand image, the consumers brand awareness will rise, and the consumers opinions about the product will change and will be influenced more based on how they feel about the brand itself, and not their products.

1.4 Perceived Price.

The next chapter will discuss the definition of price perception, its influence and importance towards consumers.

1.4.1 Defining Price Perception

Researchers have studied consumer price perception and identified it from a few different angles. According to Djatmiko and Pradana (2016) price is a factor that can be determined by the interaction between the supply and the demand of production. Pricing can also be heavily dependent on variety of different forces such as environmental forces, marketing, and competition forces. From the consumers point of view, price firstly should be considered as what the consumer got for the price that they paid. Secondly, price is the trade-off between quality of the products or goods and the price that was paid for it, and lastly, price perception can be considered as an evaluation by the customer towards a certain product (Pan & Kang, 2017).

Consumers are known to perceive price as the amount of money they must give up to get a product or service, however not all prices are remembered by the consumer, instead, they are encoded in a way that are meaningful to them, and this perception can be both negative and positive, based on the previous exposure consumers have had to the product or service (Djatmiko and Pradana, 2016). A large amount of consumers use pricing as a quality-signaling cue that reflects the wisdom of „you get what you pay for“ (Popp & Woratschek, 2017). When doing online shopping, customers tend to compare the prices between different vendors or product owners and form their perceptions of the price (Kim et al., 2012). Price is a heuristic cue that is more readily observable than quality (Yoon, Oh, Song, Kim & Kim, 2014).

According to the research done by Kim et al, (2012) the price influence is stronger on returning customers than for potential customers. Once the customer gains control of the transaction, their desire for monetary gains in a transaction will increase. Research conducted by Witama and Keni (2019) found out that the better the price is perceived by the customer, then the customer satisfaction will increase. This was also stated by Widagdo (2013), when the perceived price was proven to have a positive influence on customer satisfaction.

According to the studies of Rodiger et al., (2016), the majority of consumers have failed to identify to correct pricing of the store and its

goods. The consumers in the study were willing to pay over 52.7% above the store price. What is more, 67% of the respondents were willing to buy the product even if the perceived price was higher than they were willing to pay.

1.4.2 Brand image influence towards price perception

Brand image plays an important role towards creating a specific price perception and evaluation, since they lead to differentiation of products and creating additional meaning (Popp & Woratschek, 2017). Some brands were noticed to use diverse pricing strategies (Lien et al., 2015). In the field of marketing, not all brands will be found using the same premium or competitive pricing methods. The reason for that is that these pricing strategies tend to be tied to a specific kind of brand image and are only meant to create a specific perception of the brand itself in the consumers psychology. Premium pricing is used to create a perception of a premium brand image.

Furthermore, as discussed by Rodiger et al (2016), the consumers are mostly sensitive to the pricing strategies of various goods that they purchase daily, for example groceries. The consumers will choose the pricing that best represents their price perception and willingness to buy. However, it should be noted that this may not be true to products that are not being purchased often for example cybersecurity products, as the majority of the consumers will most likely fail to identify the real price of the product and would be willing to overpay for them. In sum, price perception is a highly dependent topic, which can be influenced based on consumers past experiences with different products, their relationship to the product and their expectations of what the product can bring for the price that was paid, however a large majority of consumers are willing to overpay for different products, meaning that the price perception of the consumer is highly dependent on their own understanding of the product and their willingness to pay for it.

1.5 Perceived Quality

The following chapter will be discussing the definition of perceived quality and its perception as well as the theoretical framework of quality perception.

1.5.1 Defining Quality Perception

Perceived quality is a critical element in consumer decision making process. Haikal, (2018) suggests that from the consumers perspective, quality has its own linguistic space that is different from the way quality is viewed by the manufacturer itself, when issuing a product or services commonly known by its quality. Consumers will compare the quality of alternatives to the price within the specific category (Diallo, 2012). Quality perception can also be defined as the consumers judgement about the product's overall quality and advantage relative to other products. According to Kotler and Keller (2012), quality is the total feature and characteristics of a product or service that is dependent on the ability to satisfy the needs of a customer either implicitly or explicitly.

Research done by (Chi et al. 2009) clarifies that perceived quality and actual quality of a product is different, due to several key factors. One of these factors can be a previous consumers judgment about the product that will influence their future perception of the quality. Another factor is the difference of perception between manufacturers and consumers, as they have a different judgment of quality dimensions. Final factor is the consumers lack information about the product to objectively evaluate it, even though some consumers may have enough information, it simply is not sufficient enough in time and motivation for further judgement.

It is suggested by Haikal (2018) that quality perception of a product influences consumer purchasing decision on variety of different brands, and quality becomes an added value for the consumers in the purchasing process of a product. The perceived quality of a product takes an important role towards building a brand. It should be noted that in many contexts, the perceived quality of the products from a specific brand can become an important reason for purchasing their products.

Severi and Ling (2013) asserts that the perceived quality can act as a key influencing factor that will help in determining consumers choice. However, quality perception as a concept has several individual attributes, by which it is affected. These attributes include the previous experience of the consumer, their educational level, risk perception and situational awareness. Moving deeper, attributes such as the purpose of the purchase, purchasing situation, time pressure and even social backgrounds can have a completely different influence on the perceived quality of the product (Chi et al, 2009). To sum up, consumer quality perception is heavily reliant on consumers subjective judgment, previous experiences, feelings, and their purchasing situation.

1.5.2 Theoretical Framework

According to Lovelock and Writz (2016), service discrepancy is not the only way for the consumer to assess the quality of the service, there are also five broad dimensions for these criteria that are mentioned in Table 2. As the nature of services requires a distinctive approach for defining and measuring their quality, the intangibility and complex nature of many of these services makes it harder to evaluate the goods and compare services between one another.

Table 4. Five criteria's used to evaluate service quality

Dimension	Definition
Tangibles	Physical evidence of service delivery
Reliability	Accurate and satisfying service, as promised by the brand and company itself.
Responsiveness	The customer service efficiency in providing help to the customer as well as selling the product or service itself.
Assurance	The ability for employees to cater to all the customers' needs in a friendly and supportive manner, in a quick and reliable way.
Empathy	Establishing a sincere connection with the customer, providing them personal attention, and understanding their needs and meeting them within the timeframe.

(Based on: Lovelock and Writz, 2016)

1.6 Conclusion of the literature review

Overall, in this section of the paper, the key variables have been identified and discussed based on several different studies and research as well as the main definitions and ideas from other authors have been researched and adapted in order to successfully develop the research model in later parts and to define the key understanding of why such study is important for the academic literature.

The following variables and their definitions have been presented (See Table 5): Brand image, Perceived Price, Perceived Quality, Perceived Effectiveness of Privacy Policy, Perceived Privacy Risk, and Intention to buy. Furthermore, the concepts and definitions of these variables have been discussed based on variety of different academic literature sources. The key

reason towards the need to analyze the relationship between these variables have been presented.

By analyzing the literature review, key focus points of each variable have been discovered. All these variables and their relationship with each other in terms of hypotheses will be discussed in the next chapter of the paper.

2. Research Methodology

This section of the thesis describes the research methodology in depth. Firstly, the conceptual model and hypothesized connections will be presented. Secondly, the section will explain why this specific research strategy and technique were chosen. Following that, the sampling procedure and sample size rationale are explained. Finally, this section outlines the steps for data analysis that will be used in the empirical study section. Finally, each construct's scale development method is detailed based on adopted models.

Table 5. List of variables

Variable	Measures	Source
Independent variables		
Brand Image	Measured how the brand is perceived from the perspective of the consumer	Kotler and Keller (2015), Kapferer (2012),
Perceived Price	Measured how is the price perceived from the perspective of the consumer compared to other products	Djarmiko and Pradana (2016), Kim et al. (2012), Witama and Keni (2019)
Perceived Quality	Measured how the quality of the brands products is perceived compared to other products	Lovelock and Writz, (2016), Haikal (2018), Chi et al. (2009)
Perceived effectiveness of privacy policy	Measured how well users perceive the effectiveness of certain privacy policies	Malandrino et al. (2013), Henderson, (2015)
Dependent variables		
Perceived Privacy risk	Measures the overall user perception on cyber security related risks on the internet or when using	Zhou (2015), Wang (2019)

	the specific product or service.	
Intention to buy	Measures the influence of other variables towards user intention to buy a product or service	Foster (2016)

(Note: Prepared by the author of the thesis)

The variables presented in Table 5 will be tested and analyzed in the next sections of the paper and will present key findings and results. After analyzing the literature review the following aspects of the variables have been identified:

Brand image - measures how the brand is perceived from the perception of the consumer.

Perceived price - measures how the price is perceived, from the perception of the consumer based on other products.

Perceived Quality – measures how the quality of the brands products is perceived from the perception of the consumer based on other products.

Perceived effectiveness of privacy policy – measures the perception of certain privacy policies of a product or brand from the perspective of a consumer.

Perceived Privacy risk – measures the overall perception of cyber security related risks on the internet, and of using the product or service.

Intention to buy – measures the influence of different variables towards consumer intention to purchase a product or service.

2.1 Research Model and Hypotheses

The research model framework was adapted from similar research studies, which analyzed the relationships between brand image, price perception, quality perception and intention to buy, as well as studies about cybersecurity, user privacy awareness and their influence towards intention to buy. Some of the hypotheses have been used and adapted from previous studies as they fit the general research goals. Furthermore, extra hypotheses were developed to test their correlation with certain new variables, after adapting and updating the research model framework for this study. The model can be seen in Figure 2.

Research problem: How does the impact of brand image, perceived price and perceived quality of products and services affect the consumer intention to buy, based on effectiveness of privacy policy and perceived privacy risk.

Goal of the research: The goal of this research is to present a research model which analyzes the impact that the safety of user privacy has on consumer intention to buy, while also considering the involvement of brand image, price perception and quality perception as key factors affecting the consumer intention to buy.

Theoretical research model has been adapted from several research models, as there was no one model that would fit the goal of the research. The research model was developed and adapted based on three different studies from: Lالujan et al (2016), Witama and Keni (2019) and Wang (2019). The following research model as seen in Figure 2 will be tested by an empirical study. During the empirical study, in which is described in the next section of this paper, the study will aim to detect how the consumer intention to buy is influenced by brand image, price perception, quality perception, perceived effectiveness of privacy policy and perceived privacy risk as well as their relationships between each other.

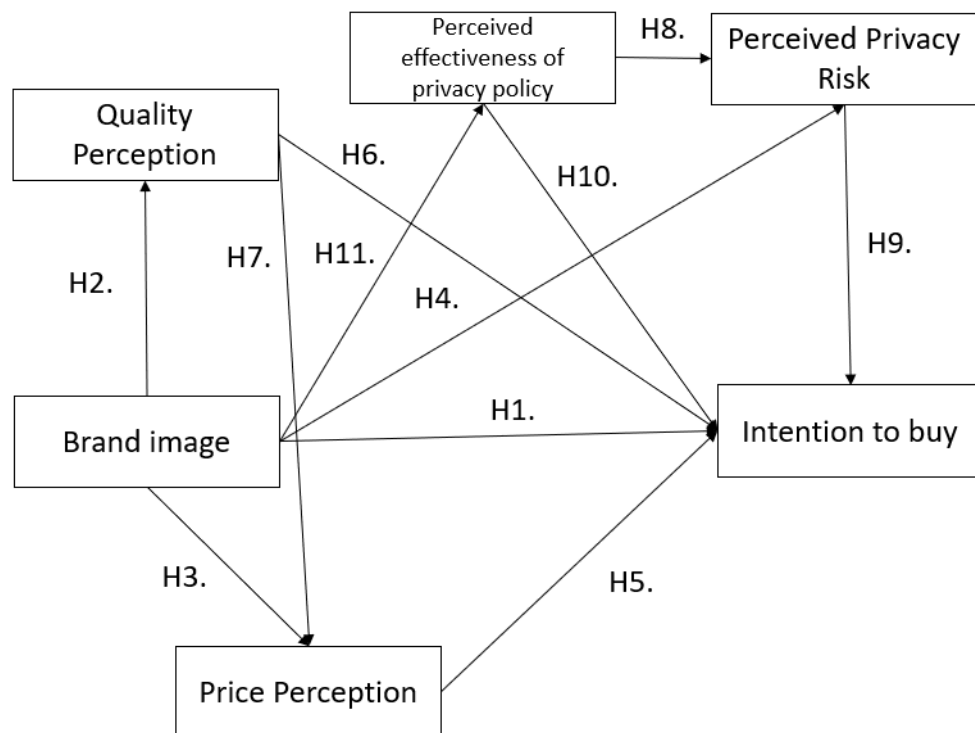


Figure 2. Research Model

The hypotheses list developed for the research can be seen in Table 6.

Table 6 Hypothesis List

No.	Hypothesis
H1.	Brand Image has a direct positive impact on Intention to Buy
H2	Brand Image has a direct positive impact on Quality Perception
H3	Brand Image has a direct positive impact on Perceived Price
H4	Brand Image has a direct positive impact on Perceived Privacy Risk
H5.	Price Perception has a direct impact on Intention to Buy
H6.	Quality Perception has a direct impact on Intention to Buy
H7.	Quality Perception has a direct impact on Perceived Price
H8.	Perceived Privacy Risk has a direct impact on Perceived Effectiveness of Privacy Policy.
H9.	Perceived Privacy Risk has a direct positive impact on Intention to Buy.
H10.	Perceived Effectiveness of Privacy Policy has a direct impact on Intention to Buy.
H11.	Brand image positively influences the Perceived Effectiveness of Privacy Policy.

(Note: Prepared by the author of the thesis)

Based on the research model and the developed hypotheses for the thesis, the next section will explain each component of the study and its hypotheses.

- H1.** *Brand image has a direct positive impact on Intention to Buy;*
H2. *Brand image has a direct positive impact on Quality Perception;*
H3. *Brand image has a direct positive impact on Perceived Price;*
H4. *Brand image has a direct positive impact on Perceived Privacy Risk.*

As discussed in the literature review, consumer intention to buy can be influenced by a variety of different reasons, from external to internal factors such as social norms or their overall perception of the product and/or brand (Foster, 2016). It is hypothesized that the better the brand image – the more likely are consumers to purchase the product. Brand image’s influence towards variety of different consumer perceptions have been evident in the

literature review (Bahari et al., 2020). The better the brand perception, the better would be the consumer perception about the products quality, price and perceived privacy risk that comes with using the product.

H5. *Price perception has a direct impact on intention to Buy.*

Djatkiko and Pradana (2016) identified the importance of consumer perceived price towards their interaction with the product or service. According to Rodiger et al., (2016), majority of the consumers fail to identify the correct price of a product and are willing to purchase it by overpaying for the product. The hypothesis tests whether the consumer perceived price of Nord VPN has a direct influence on consumer intention to buy, it is assumed that the better the price perception of the product is, the higher is the intention to buy it.

H6. *Quality perception has a direct impact on Intention to Buy.*

H7. *Quality perception has a direct impact on Perceived Price*

As identified in the literature review, Quality Perception as a factor is a critical element in consumer decision making process (Haikal, 2018). The perceived quality of the product could have a direct influence on not only intention to buy but also the perceived price of the product and how much are consumers willing to pay for a specific product, due to their qualities. As Nord VPN is a digital product, measuring its quality must be done via measuring its services and whether or not they are reliable. The hypotheses are formed based on academic literature and research studies, which indicate that the higher the quality of a product or service, the higher are the consumers intention to buy the product as well as the price perception of the product is positively influenced by it.

H8. *Perceived Privacy Risk has a direct impact on perceived Effectiveness of Privacy Policy.*

H9. *Perceived Privacy Risk has a direct positive impact on intention to buy.*

As the user awareness of privacy risk is growing, their perceptions of the product and its safety are considerably taken into account (Wang, 2019). This could be also true for a digital product such as VPN, that is dedicated towards cybersecurity and data protection. As privacy risk increases, the chances of users acknowledging the effectiveness of privacy policy increases. Also, the lower the perceived privacy risk of a product, the higher are the purchase intentions of the consumer.

H10. *Perceived Effectiveness of Privacy Policy has a direct impact on Intention to Buy.*

Studies done by Malandrino et al. (2013) indicate that user knowledge about privacy protection is low, therefore they rely on law and regulations, as well as Privacy Policies of the company. Assuming that the consumer has directly acknowledged, read and agreed to the privacy policy of the given product, they will have a higher intention to buy, due to the perception that the privacy policy will effectively protect their needs as a consumer.

H11. *Brand image positively influences the Perceived Effectiveness of Privacy Policy.*

As brand image is one of the key factors affecting consumer perception of the product, price, and quality, it also influences the way the consumer perceives the effectiveness of the company's privacy policy. The better is the brand image perception, the more likely is the chance, that the consumer will accept that the privacy policy is effective.

2.2 Research Design and Data Collection

There are three approaches used towards collecting primary data to conduct research. These approaches are quantitative research, qualitative research, and mixed research methods (Williams, 2007). The approach that was applied in this research is a quantitative method (Zikmund, et al., 2013). This specific research method was chosen to test specific hypotheses and to examine the relationships between the variables by using a survey.

The quantitative research method was chosen due to several advantages that it provides to the researcher. To begin with, this approach allows the researcher to quantify the data and analyze the sample to make certain conclusions about the specific population (Zikmund, et al., 2013). Furthermore, quantitative research method allows to maximize objectivity, generalizability, and reliability of the findings (Conrad & Serlin, 2011). Additionally, the collected data can be analyzed using statistical tools, which are objective and can provide more accurate information (Zikmund, et al., 2013).

The earlier conducted literature review has shown that the majority of the research studies have used an online questionnaire to collect their data methods and to conduct research (Severi and Ling, 2013; Kim et al., 2012; Zhou, 2012; Wang; 2019; Xu et al., 2013; Dam 2020; Yoo et al. 2000; Chang et al. 2019). During the survey, different scales are used to

collect data: nominal, ordinal and Likert Scale methods, which have been widely used by the research mentioned earlier in the paper. The online survey collection method allows respondents to fill in the data independently at any given time, it also assures the anonymity of the study.

The quantitative research method explores the interaction between independent and dependent variables (Williams, 2007). In the case of this research, the thesis seeks to determinate the impact of brand image, perceived price, perceived quality on intention to buy while considering the effect of perceived privacy awareness and user cyber privacy risk towards purchasing Nord VPN.

This research paper uses two data collection methods: primary and secondary. The survey method is used as the primary data collection method to collect quantitative data. The goal of the survey method is to gather relevant information from a selected respondent sample by asking to fill in a questionnaire, where the respondents were asked to rate the brand image, price, quality, privacy risk and privacy policy effectiveness of NordVPN.

According to academic research, there are several reasons why the survey method is preferred. Firstly, the survey design is cost-effective and timesaving for the researcher (Zikmund, et al., 2013). Secondly, survey design allows for a straightforward data analysis method with an easy transfer of the data to a statistical research software, which is especially relevant for the empirical part of the study (Dörnyei & Taguchi, 2009). And finally, the respondents are submitting their responses anonymously, and the willingness to participate in such studies are much higher than other methods (Dörnyei & Taguchi, 2009). To add up, the survey method generates higher response rates than other methods used for primary data collection.

The survey collection method is done via the Internet, as it allows an easy setup and deployment as well as high flexibility of the data collection (Malhotra, 2007). Internet survey is a low-cost and high-speed data collection method compared to its other alternatives, for example moderated in-home surveys (Malhotra, 2007). Furthermore, the interviewer bias is eliminated, which usually can occur during mobile phone interviews. This type of data collection is also preferred by many individuals due to its easy-to-understand nature. The online survey has been created using Google Forms and shared via Social Media sites such as LinkedIn, Facebook, Instagram and amongst employees of two different companies.

Secondary data collection method is based on variety of relevant references such as: scientific articles, journals, and academic research sources related to the topic of this study, which can be found online.

2.3 Sampling process and size

The method of sampling in this study is called a convenience sampling method. According to Bhattacharjee (2012) convenience sampling technique which can also be called accidental or opportunity sampling technique is done by taking a sample from a population that is easily accessible and available to the researcher. Convenience sampling technique is most frequently used by researchers who want to collect a large amount of data in a short period of time, by allowing the data collection from any of the chosen and available population. Relating to the size of the sample, as suggested by Severi and Ling (2013), the number of samples that are appropriate for such study range from 200 to 500 respondents, and is enough for majority of research purposes, given that the subject is homogenous, and the number of variables is not too extensive.

Before the data collection method was started, the average number of respondents was calculated based on relevant academic studies of previous authors of which the constructs or items were adopted. The number of respondents and type of questionnaire can be seen in Table 7. The average number of respondents from 8 studies has been calculated at 312.

Table 7. Comparison of Research and sampling methods

No.	Author	Type of questionnaire	Number of respondents
1.	Severi and Ling (2013)	Online Questionnaire	330
2.	Kim et al., (2012)	Online Questionnaire	513
3.	Zhou (2012)	Online Questionnaire	191
4.	Wang (2019)	Online Questionnaire	425
5.	Xu et al. (2013)	Online Questionnaire	200
6.	Dam (2020)	Online Questionnaire	285
7.	Yoo et al. (2000)	Questionnaire	195

8.	Chang et al. (2019)	Online Questionnaire	363
Average:			312

(Note: prepared by the author of the thesis)

Based on the results of these studies, and the calculated average number of respondents the data collection stage aimed to collect more than 312 responses during its time.

2.4 Variables and Measurement

The following section summarizes the measurement scales of the research, which are considered valid and reliable. The measurement scales have been adapted from previous studies and research for example: Severi and Ling (2013), Kim et al., (2012), Zhou (2012), Xu et al., (2013) and Yoo et al., (2000).

The measurement of variables: brand image, price perception, quality perception, perceived privacy risk, perceived effectiveness of privacy policy and intention to buy have all been based on academic researchers. Each of them will be represented separately.

Identification of variables is necessary to create a research model and analyze the relationship between them. According to Kumar (2018) an independent variable is a variable that is responsible for influencing the change of a situation or phenomena. A dependent variable is an outcome or a change that occurs due to the causation of the independent variable (Kumar, 2018).

2.5 Research constructs

In this section of the paper, the constructs of the research will be presented and discussed, based on relevant academic literature. The following constructs will be defined: **Brand image, Price perception, Quality perception, Perceived privacy risk, Perceived effectiveness of privacy policy and Intention to buy**. The questionnaire of the research can be found in **Appendix 1**.

Brand image. In this research, Brand image is an independent variable. The measurement of brand image as a variable has been based on the studies and constructs of Kim & Kim (2005) and adapted accordingly. According to the research of these authors, Brand Image as a variable has a direct influence towards consumer Price perception, Quality perception and a direct impact on the Intention to Buy. Witama and Keni, p. 316 (2019)

define brand image as “A set of brand associations that are formed and attached to the minds of consumers “. Furthermore, brand image can also be defined as a description of some association and confidence in certain brands.

The measurement scales for brand image have been adapted from previous research studies. According to authors Kim & Kim (2005), brand image measurement scale should be a 5-point Likert Scale, with 1 indicating “strongly disagree” and 5 indicating “strongly agree”. The construct was measured using 5 items, by measuring the consumer awareness of the brand and its image itself.

Price perception. Price perception can be defined as an independent variable. According to Djatmiko and Pradana (2016), the concept of perceived price can be described as the amount of money that is used to obtain a product or service. The perception of the price can vary based on the consumers attitude towards the product. The price can be considered: fair, fixed, reliable or relative. The price perception itself is very easily influenced by various outside sources: economic, environmental, competition, marketing, however, the first thing price is considered as is what the consumer gets for the price they pay (Djatmitko and Pradana, 2016). Brand Image can also influence Perceived Price of the product, by using different pricing methods, therefore a well established brand can charge a higher price for a product that is perceived better than their competitor.

The construct to measure price perception has been adapted from Gefen and Devine (2001), based on study done by Kim et al (2012). Perceived price is measured on a 5-point Likert Scale, where 1 indicates “Strongly Disagree” and 5 indicates “Strongly Agree”. There was a total of 4 items to measure the perceived price of the product.

Quality perception. According to Severi and Ling (2013), perceived quality is one of the primary variables that is essential towards studying and evaluating the relationship between brand image and intention to buy. Quality perception itself is a summary construct, since the actual quality of a product and the perception of the quality are both perceived based on the buyer’s subjective opinion about a product (Zeithaml 1988). Chi et al., (2009) suggested that it is important to clarify the difference between the actual real quality of the product and consumers judgment about it, as the judgment itself can have several different influence factors.

Consumer lack of information about the product can also influence the perceived quality of the product.

The measurement scales for this construct is a 5-point Likert scale from 1 to 5, with 6 measurement items ranging from “Strongly Disagree” to “Strongly Agree” with 1 item being a reversed measurement item, where 1 equals “Strongly Agree” and 5 equals “Strongly Disagree”. The construct measurement is adopted from research done by Yoo et al., (2000). The construct itself measures functionality, reliability, trustworthiness, and quality of the product itself.

Perceived privacy risk. Chang et Al (2018) state that users perceived privacy risk is a concern that is directly associated with their levels of anxiety regarding their personal information. Anxiety increases based on variety of different unpleasant scenarios. Research shows that the effectiveness of privacy policy directly increases users perceived privacy risk. Perceived privacy risk is related to user privacy awareness – the understanding of who is tracking the user’s data, when is it collected and what information do others receive from the data that was stored (Malandirno, et al. 2013). The perceived privacy risk itself is identified as the negative consequences of using a particular product or service that involves any potential losses, that may or may not result by disclosing their personal information (Zhou, 2012). Wang (2019) suggests that brand image can outweigh the perceived risk of privacy.

Validated measurement items have been adapted from the relevant literature. Items and construct for measuring perceived privacy risk were adopted from Wang and Lin (2017). Perceived privacy risk has been measured with a three item, 5-point Likert-scale questions, where 1 is equal to “Strongly Disagree” and 5 equals “Strongly Agree”.

Perceived Effectiveness of Privacy Policy. According to research done by Wang (2019) the perceived effectiveness of privacy policy is based on the people’s judgment of how well a company can manage their user’s personal information. If a high number of people have a positive recommendation of some object or activity, the more believable the effectiveness of its’ policy is. In general, the more people recommend some sort of activity, the better will be the perception of it’s policy. As users often have inadequate knowledge about their private data, the perception of an effective privacy policy may vary from person to person, and can be easily influenced by other factors, for example brand image, or perceived quality (Malandrino et al, 2013).

The construct of perceived effectiveness of privacy policy has been measured by adopting the constructs from Xu et al. (2011) and Wang (2019). The effectiveness of perceived privacy policy has been measured with three items based on a 5-point Likert scale, when 1 is equal to “Strongly disagree” and 5 is equal to “Strongly agree”.

Intention to buy. Consumer intention to buy a product or service is a dependent variable in this paper. According to Foster (2016) the intention to buy arises after the evaluation of other alternatives and it is a behavior before making the purchase of the product. The influence factors of intention to buy can be related to feelings or emotions as well as external factors about the product or service – for example it’s perceived brand image, it’s price or quality (Haikal 2018). Whenever purchasing a product, each consumer goes through a inner purchase decision making process, which influences their outcome of actually buying the product (Peter and Olson, 2010). After several evaluation process are passed, the consideration of alternatives is done, the consumer intends to purchase the product. According to other research and consumer beliefs, intention to buy has a positive correlation with the perceived price of the product, however the process itself can be facilitated and sped up by external factors, for example a positive brand image of the product (Chich – Chung et al., 2012).

The construct and measurement scales to measure its’ effectiveness have been adapted from Dam (2020). The measurement of intention to buy has been evaluated by four items on a 5-point Likert scale, where 1 is equal “Strongly Disagree” and 5 equals “Strongly Agree”.

3. Empirical research

The aim of this section is to analyze and test the validity of the previously proposed hypothesis and validate the research model. To test the validity of the hypotheses, several steps must be followed. At first, the section starts with describing the characteristics of the data of the research. Secondly, a reliability and validity of each construct are conducted and reviewed using a calculation of Cronbach's alpha. Thirdly, regression and assumptions of it are tested with analysis of linear relationships between them. Based on these steps a regression analysis is performed with conclusions towards the hypothesis being made.

3.1 Data Collection and Demographics

The online questionnaire has been carried out from November 17th to November 27th, 2021. The questionnaire was shared amongst different social media channels: Facebook, LinkedIn and Instagram, as well as two different companies with the access to the relevant demographic sample, where the average age of the employees was below 30 years old. This process allowed to gather data from participants with different characteristics as well as from countries that are outside of Lithuania.

In total, 337 responses were collected. Out of 337 respondents, out of which 16 were invalid, leaving 321 valid respondents. Out of the total valid responses, 57.3 percent were Male, 39.6 percent were Female respondents, with 2.5 percent selecting "Prefer not to say" and 0.6 percent selecting "Other" gender.

In terms of age, the majority of the respondents are in the 22–25-year age group, representing 48.6 percent of the total respondents. The second largest age group is 30-33 (23.7 percent), following by 26-29 (19.3 percent). The lowest number of respondents were collected from 34+ (4.7 percent) and the 18-21 years old (3.7 percent) groups.

Based on the results, which are indicated in Table 6, the data gathered from respondents goes in line with the proposed sample frame of the study. As the sample mainly consists of respondents aged from 18 to 33 (95.3 percent)

Table 8. Descriptive Demographic Statistics: Gender and Age

Criteria	Number of Respondents	Percentage	Combined Percentage
Gender			
Male	184	57.3	100
Female	127	39.6	
Other	10	3.1	
Age			
18-21	12	3.7	100
22-25	156	48.6	
26-29	62	19.3	
30-33	76	23.7	
34+	15	4.7	

(Note: Prepared by the author of the thesis.)

Analyzing the survey respondent data based on income, it has been noted that the majority of the respondents (46.1 percent) earn from 1501\$ to 2000\$, which is above average income. Second largest group of respondents (24.9 percent) are in the income group of 1001-1500\$. The third largest group is the respondents that earn from 2001\$ and above (19.9 percent). The lowest income groups of up to 500\$ a month and 500-1000\$ a month are responsible for 4 percent and 5 percent of the total respondent group.

Table 9. Respondent average income statistics

Average income per month	Number of Respondents
<500\$	4%
501-1000\$	5%
1001-1500\$	24.9%
1501-2000\$	46.1%
2001\$+	19.9%

(Note: Prepared by the author of the thesis.)

Out of 337 respondents, 76.3% were located in Lithuania, and 23,7% were located in other countries, which were not specified.

The next section of the study will analyze the reliability of the answers collected from the survey.

3.2 Reliability Analysis

Each of the constructs of the study were measured using scales that were adopted from different academic research. The scales demonstrate a high reliability in their original studies, it is important to check each and every scale and it's reliability. There are several ways to test reliability and

validity of the scale, however the technique used in this study was done by calculating Cronbach's Alpha of each of the constructs (Santos, 1999). According to Gliem and Gliem (2003), the Cronbach Alpha of the construct or variable must be above 0.7 for it to be considered valid and acceptable.

The summary of the results can be seen in Table 10. The selected constructs of the paper all have an acceptable level of Cronbach's Alpha, which is considered valid when it is above 0.7. One of the constructs' – Quality Perceptions' Cronbach's Alphas has been improved by removing an item from the construct to improve the scales' reliability from 0.775 to 0.938. This was done due the fact that the last item of the construct was a negative question and could have possibly affected the respondent's ability to answer it correctly.

Table 10. Variable reliability test (Adjusted by removing 1 variable)

Variable	Cronbach's alpha
Brand Image	0.861
Price Perception	0.835
Quality Perception	0.775 → 0.938 (Adjusted)
Intention to buy	0.880
Perceived Privacy Risk	0.931
Perceived Effectiveness of Privacy Policy	0.957

(Note: Prepared by the author of the thesis.)

According to the results seen in Table 10 above, all the variables have an acceptable Cronbach's Alpha for further analysis.

3.3 Descriptive Statistics Analysis

The descriptive statistics of each construct can be seen in Table 8. Each of the construct used in the study have been evaluated on a 5-point

Likert scale. 1 Stands for “Strongly Disagree” while 5 stands for “Strongly Agree”.

Table 11. Summary of descriptive statistics

	Mean	Standard Deviation
Brand Image	3.8559	0.892
Price Perception	3.3686	0.868
Quality Perception	3.9202	0.815
Intention To Buy	3.5452	0.934
Perceived Privacy Risk	2.8982	1.048
Perceived Effectiveness of Privacy Policy	3.4590	1.037

(Note: Prepared by the author of the thesis.)

Based on the results provided in Table 11, it appears that the respondents of the study perceive Nord VPN as a somewhat recognizable brand (mean is 3.8 out of 5), with a somewhat high-quality product (mean is 3.9 out of 5). The respondent intention to buy Nord VPN is positive, with a mean of (3.5 out of 5). The respondents have also identified Nord VPN as a product that has a somewhat trustable privacy policy and in general, the information provided to the company is safe, based on their policy agreement (mean is 3.4 out of 5)

The price perception of Nord VPN is leaning towards neutral side with mean of 3.3 out of 5, when compared to other products. The respondents do not seem to be sure that Nord VPN is the cheapest service in

the market, compared to other competitors. What is more, the respondents Perceived Privacy Risk is leaning towards the negative side with a mean of 2.8 out of 5. The respondents of the study seem to not be very confident with providing their personal information to Nord VPN, even though they do trust the effectiveness of their privacy policy

3.4 Correlation

The purpose of a correlation analysis is to test the linear relationship between two different variables. Linear regression is performed when there is a relationship between two types of variables: dependent and independent.

The correlation test between variables was performed and their results were analyzed based on academic literature. Lee, Cho and Kim (2010) suggest their version of interpreting the correlations. When the correlation value is between .00 and .19 – it is considered a very weak correlation. When the values are between .20 and .39, correlation indicates a weak relationship between the variables. Moving on, a .40 to .59 correlation is a moderate correlation. And when the correlation values are between .60 and .79 – it's considered a strong correlation. Any values above .80 are considered very strong correlation. The correlation values and their interpretation can be found in Table 12.

Table 12. Identification of Correlation Values.

Correlation Value	Correlation Meaning
0.00 – 0.19	Very weak correlation
0.20 – 0.39	Weak correlation
0.40 – 0.59	Moderate correlation
0.60 – 0.79	Strong correlation
<0.80	Very strong correlation

(Note: Prepared by the author of the thesis, Based on Lee, Cho and Kim (2010))

The findings of the bivariate correlation are displayed in Table 13. Based on the Spearman's correlation matrix, the results of the correlation analysis are the following:

1. Strong Correlation (0.667) between Brand Image and Perceived Quality;
2. Moderate Correlation (0.489) between Brand Image and Perceived Effectiveness of Privacy Policy;
3. Moderate Correlation between (0.583) Brand Image and Intention to Buy;
4. Weak correlation (0.352) between Perceived Price and Perceived Privacy Risk;

5. Strong Correlation (0.651) between Perceived Quality and Perceived Effectiveness of Privacy Policy;
6. Strong Correlation (0.751) between Perceived Quality and Intention To Buy
7. Moderate Correlation (0.583) between Perceived Effectiveness of Privacy Policy and Intention To Buy.
8. Negative Correlation (-.020) between Perceived Price and Perceived Effectiveness of Privacy Policy.

Table 13. Bivariate Correlation between variables using SPSS

		Brand Image	Perceived Price	Perceived Quality	Perceived Privacy Risk	Perceived Effectiveness of Privacy Policy	Intention To Buy
Brand Image	Correlation	1	.075	.667**	.008	.489**	.583**
	Sig. (2-tailed)		.178	<.001	.891	<0.01	<0.01
Perceived Price	Correlation	.075	1	.010	.352**	-.020	.015
	Sig. (2-tailed)	.178		.860	<.001	.727	.793
Perceived Quality	Correlation	.667*	.010	1	.021	.651**	.715**
	Sig. (2-tailed)	<.001	.860		.712	<.001	<.001
Perceived Privacy Risk	Correlation	.008	.352**	.021	1	.041	.179**
	Sig. (2-tailed)	.891	<.001	.712		.462	.001
Perceived Effectiveness of Privacy Policy	Correlation	.489*	-.020	.651**	.041	1	.583**
	Sig. (2-tailed)	<0.01	.727	<.001	.462		<.001
Intention To Buy	Correlation	.583	.015	.715	.179	.583	1
	Sig. (2-tailed)	<0.01	.793	<.001	.001	<.001	

** . Correlation is significant at the 0.001 level (2-tailed)

(Note: Prepared by the author of the thesis.)

Based on this correlation test, it can be concluded, that the results between the variables are significant.

Furthermore, a bivariate correlation analysis using Spearman's rho was conducted to identify whether there was any significant relationship

between respondents' income and their chosen answers. The results can be seen in Table 14.

Table 14. Correlation between respondent income and chosen answers

		Brand Image	Perceived Price	Perceived Quality	Perceived Privacy Risk	Perceived Effectiveness of Privacy Policy	Intention To Buy
Monthly Income	Correlation	.072	.135	.063	.096	.009	.120
	Sig. (2-tailed)	.197	.016	.257	.086	.872	.032
**. Correlation is significant at the 0.001 level (2-tailed)							

According to the conducted correlation using Spearman's rho, there are no significant relationships between respondent income and their chosen answers.

3.5 Hypothesis Testing

Based on reliability testing and correlation analysis, a significant correlation between 7 variables has been detected. The analysis has been used to analyze whether the projected hypotheses of the thesis are supported.

H1. *Brand image has a direct positive impact on intention to buy.*

When analyzing the correlation of the H1 hypothesis using Pearson's Correlation, it has been detected, that the Pearson R = 0.583, $P < 0.001$, which shows a significant and moderate correlation between the variables, according to Lee, Cho and Kim (2010). Such correlation shows that Brand Image has a positive impact on Intention to Buy Nord VPN. Therefore, Hypothesis **H1 is supported** (refer to Table 14). According to literature review, such result has been detected by previous research authors: Lallujan et al. (2010), Lien et Al., (2015). The findings of this research validate the previous ideas of the authors; however the previous research did not measure the Intention to Buy a digital product.

H2. *Brand image has a direct and positive impact on Quality Perception.*

When analyzing the results of hypothesis H2, the Pearson's Correlation R = 0.667, $P < 0.001$ which is considered a significant and strong correlation, based on studies done by Lee, Cho and Kim (2010). Such correlation allows us to conclude that Brand Image has a direct and positive impact towards consumers Perceived Quality, therefore hypothesis **H2 is supported**. This result matches the result of study done by Ahmad et al.,

(2014), and shows that Brand Image plays a significant role in Quality Perception of not only a physical products, but a digital, cybersecurity product such as Nord VPN.

H3. *Brand image has a direct positive impact on Perceived Price.*

According to Pearson's Correlation coefficient $R=0.075$, based on studies done by Lee, Cho and Kim (2010), this result implies a very weak correlation between the variables, which means that Brand Image has no positive impact towards consumer price perception towards a cybersecurity product – Nord VPN. Consequently, Hypothesis **H3 is Not Supported**. The result of such test could be justified due to the nature of the product that is a VPN, and although other research studies such as Djatmiko and Pradana (2015), imply that Brand Image has an impact on Price Perception, based on this research, Brand Image for a cybersecurity product has no impact on consumer Perceived Price of the product due to its' nature of being a digital, privacy related product. Previous research was done on physical product only, which could possibly have a higher dependence of Brand Image towards its' price.

H4. *Brand Image has a direct positive impact on Perceived Privacy Risk.*

When analyzing the correlation between the two variables for hypothesis H4, it has been noted, that the Pearson's $R= 0.008$, $P=0.891$ which based on studies of Lee, Cho and Kim (2010) implies a very weak, statistically insignificant correlation, it can be concluded that Brand Image has no impact towards user Perceived Privacy Risk of a VPN product. Based on these results, the hypothesis **H4 is Not Supported**. According to the research done by Wang (2019) such result is to be expected, however the previous research done only measured the indirect effect of Brand Image on Perceived Privacy Risk. When analyzing the correlation between Brand Image and Perceived Effectiveness of Privacy Policy on Perceived Privacy risk, the hypothesis was also not supported.

H5. *Perceived Price has a direct impact on Intention to Buy.*

After the testing of hypothesis H5, it has been detected, that Pearson's $R=0.15$, $P=0.15$. According to Lee, Cho and Kim (2010), when Pearson's Correlation R is from 0.00 to 0.19, the correlation between the variables is very weak, it can be concluded that Perceived Price has no significant impact on Intention to Buy, hypothesis **H5 is Not Supported**. Similar results to these findings have been discovered in research done by Kim et al., (2010), who have discovered that consumer Perceived Price does

not significantly influence consumer decision to purchase a product, this can be adapted towards a cybersecurity product accordingly.

H6. *Quality Perception has a direct impact on intention to buy.*

Hypothesis testing with Pearson's Correlation showed the results of $R=0.715$, $P<0.001$. Based on the study of Lee, Cho and Kim (2010), such result can be considered as a strong correlation, meaning that Quality Perception is extremely important for users when intending to purchase Nord VPN, or a cybersecurity product in general. Therefore, Hypothesis **H6 is Supported**. The results of this hypothesis test matches the ones done by Chi et al., (2012), where the Perceived Quality has a strong and positive influence on Intention to Buy. Such result has been detected by author Haikal (2018), and it proves the hypothesis that Quality Perception has a direct and also positive impact on consumers Intention to Buy a cybersecurity product.

H7. *Quality Perception has a direct impact on Price Perception.*

When testing hypothesis H7, the detected correlation coefficient Pearson's $R=0.010$, $P=0.860$, which shows a very weak and statistically insignificant correlation between the variables of Perceived Quality and Perceived Price Lee, Cho and Kim (2010). Therefore, the hypothesis **H7 is not supported**. The Perceived Quality of a VPN does not influence the Perceived Price of the same product. The measurement items that this paper adopted did not measure the direct impact of Quality Perception on Price Perception. The aim of this hypothesis was to analyze the direct impact that Quality Perception may have on Price Perception, and also analyzing its relationship on Purchase Intention.

H8. *Perceived Privacy risk has a direct impact between Perceived Effectiveness of Privacy Policy.*

A conducted hypothesis testing using Pearson's Correlation method detected $R=0.041$, $P=0.462$, which is considered as a very weak correlation, with no significant result Lee, Cho and Kim (2010). Based on these results, the hypothesis **H8 is Not Supported**. Such outcome matches the results of a research done by Wang (2019), as the research have also analyzed the relationship between these variables.

H9. *Perceived Privacy Risk has a direct positive impact on Intention to Buy NordVPN.*

After testing the hypothesis H9, the results of Pearson's Correlation $R=0.041$, $P=0.462$, the hypothesis **H9 is not supported**, based on studies done Lee, Cho and Kim (2010), such correlation coefficient is considered a weak correlation. The tested hypothesis was also analyzed in a study done by Diallo (2012). The results of this hypothesis testing matches the ones done by Diallo (2012), where Perceived Privacy Risk has no direct positive impact to purchase a product. The hypothesis specifically tested the idea of purchasing NordVPN based on consumers Perceived Privacy Risk, and the result is negative.

H10. *Perceived Effectiveness of Privacy Policy has a direct positive impact on Intention to Buy Nord VPN.*

Hypothesis H10 testing via Pearson's Correlation method, showed that $R=0.583$ and $P=<0.001$. Such result, based on the studies of Lee, Cho and Kim (2010), is considered a moderate correlation, therefore hypothesis **H10 is supported**. No previous research had analyzed the relationship of Perceived Effectiveness of Privacy Policy with Intention to Buy a product. The hypothesis test results provide some important information for Cybersecurity product brands, as the Perceived Effectiveness of Privacy Policy has a moderate correlation.

H11. *Brand Image has a direct and positive impact on Perceived Effectiveness of Privacy Policy of Nord VPN.*

Hypothesis testing has show that the relationship between the variables Brand Image and Perceived Effectiveness of Privacy Policy of Nord VPN is considered a Moderate Correlation, when $R=0.489$ and $R=<0.001$, based on Lee, Cho and Kim (2010). Therefore, the results of this hypothesis testing concludes that **H11 is supported**. Wang (2019), first suggested the idea of Perceived Privacy Risk being out-weighted by other variables, due to the lack of knowledge from the consumers. Such result matches the results from the study, and further increases the implications that Brand Image is an important factor towards consumer Perception of Effectiveness of Privacy Policy.

The full results of hypotheses testing, with the complete values of Pearson's R and P can be seen in Table 15.

Table 15. Hypothesis Correlation Test Results using SPSS

No.	Hypothesis	Result
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H1.	Brand image has a direct positive impact on Intention to Buy	Supported R=0.583, P=<0.001
H2	Brand image has a direct positive impact on Quality Perception	Supported R=0.667, P=<0.001
H3	Brand image has a direct positive impact on Perceived Price	Not Supported R=0.075, P=0.178
H4	Brand image has a direct positive impact on Perceived Privacy Risk	Not Supported R=0.008, P=0.891
H5.	Price perception has a direct impact on intention to Buy	Not Supported R=0.15, P=0.15
H6.	Quality perception has a direct impact on Intention to Buy	Supported R=0.715, P=<0.001
H7.	Quality perception has a direct impact On Perceived Price	Not Supported R=0.010, P=0.860
H8.	Perceived privacy risk has a direct impact on perceived effectiveness of privacy policy.	Not Supported R=0.041, P=0.462
H9.	Perceived privacy risk has a direct positive impact on intention to buy.	Not Supported R=0.041 P=0.462
H10.	Perceived effectiveness of privacy policy has a direct impact on intention to buy.	Supported R=0.583 P=<0.001
H11.	Brand Image has a direct and positive impact on Perceived Effectiveness of Privacy Policy.	Supported R=0.489 P=<0.001

(Note: Prepared by the author of the thesis (based on SPSS results))

Concluding the results given in the table, there was a total of 11 hypothesis, out of which 5 were supported and 6 were not supported.

4. Conclusion and Discussion of findings

The following section of the paper will discuss the results of the Empirical Research, will provide further understanding of how this study is contributing to future literature, and what were the limitations and what would be recommended for future research.

The main goal of this thesis was to analyze the influence of Brand Image, consumer Perceived Quality and Perceived Price on intention to buy a cybersecurity product, while also considering the moderating effect of Perceived Privacy Risk and Perceived Effectiveness of Privacy policy. Additionally, the direct and indirect relationships between Brand Image, Perceived Price and Perceived Quality have been analyzed. The discussion of the research results is based on several aspects. First, the implications of the study and the contribution of its findings to the academic and business literature are presented. Secondly, managerial implications are presented. Thirdly, the section presents the limitations of the study. The next section concludes the thesis and provides recommendations for future research.

4.1 Implication of the study and its contribution to the literature

Due to a growing number of cybersecurity brands and product users, as well as a growth of e-commerce in general, the potential risks and abuse of such information from third-party persons have also grown. This paper provides information and in-depth analysis of how external factors such as Brand Image, Price Perception and Quality Perception of the cybersecurity product company and products effect the consumers perception of privacy and risk.

This paper contributes to the literature by integrating and examining the effects of external information sources on perceived cyber privacy risk and consumer intention to buy a cybersecurity product – Nord VPN. These factors including brand image, price perception and quality perception. The findings show that users' perceived effectiveness of a privacy policy is influenced by both brand image, but not by the quality or price of the product. What is more, the consumer intention to buy a product is influenced by Brand Image, Quality Perception, Perceived Effectiveness of Privacy Policy, but not by Perceived Price or Perceived Privacy Risk.

The first objective of this research was to theoretically analyze the brand image, price, and quality perception elements, and empirically test them. The hypotheses **H1 – H3, H5-H7** were tested to analyze this relationship. Such hypotheses are not new in the field of marketing,

however, very few studies have done research on a digital, cybersecurity product such as Nord VPN, therefore the results of the hypothesis testing may defer from previous research. Hypothesis **H1** and **H2** were supported and confirms that Brand image have a direct impact on both intention to buy and perceived quality of the product, even when it's a digital type of product. Previous studies have only tested physical products or services. Hypothesis **H3** was not supported and showed that brand image does not have a direct impact on Perceived Price of Nord VPN. Hypothesis **H5** confirms results from previous studies and suggests that consumer intention to buy is influenced by the perceived price of the product. Additionally, hypothesis **H6** and **H7** were not supported and shows that consumer perceived quality has no direct impact on perceived price of the product (see Table 15).

Hypothesis **H4**, tested the influence of brand image on perceived privacy risk, and the analysis showed that it has no impact towards consumer perceived privacy risk. The result of this research provides valuable information by indicating that even if brand image does have influence on purchase intention, and perceived quality, the consumer perceived privacy risk is still somewhat independent.

Additional objectives were to analyze the relationships between perceived user privacy, perceived effectiveness of privacy policy and consumer intention to buy. The hypotheses **H8-H10** were tested. Hypothesis **H8** and **H9** are not supported, and the research analysis shows that user perceived privacy risk has no impact on perceived effectiveness of privacy policy, nor intention to buy. However, hypothesis **H10** shows, that perceived effectiveness of privacy policy does have an impact towards consumer intention to buy. The study enhances the understanding of what factors are important for consumers when purchasing a cybersecurity product.

Some of the results of this paper are like those of previous research analyzed in the literature review. Studies done by Chi et al., (2009), Diallo (2012), and Dam (2020) highlight the importance of Brand Image towards consumer Purchasing Intention of variety of different products, and this is true for a digital, cybersecurity product like Nord VPN. What is more, it was shown that the Perceived Quality of the product and what it delivers, matters to the consumer the most, compared to other variables. The study shows that cybersecurity product brands should pay more attention towards brand image, quality perception of their product, and its privacy policy effectiveness in the eyes of the consumer.

4.2 Managerial Implications and Limitations

Based on empirical research findings and academic literature, the study identifies the following managerial implications.

Perceived effectiveness of privacy policy is important for consumers of cybersecurity product. It is important for businesses and brands to develop a safe and effective privacy policy as it influences the consumer trust in the brand and the product as well as stimulates their intention to purchase the product. If the consumer feels that his rights and information are safe, they will trust the brand and purchase the product more often.

Furthermore, building brand image and brand awareness for such product is an important step towards influencing consumer intention to buy. By working on their brand image, the perceived quality of the brands product also increases. What is more, brand image also increases the perceived effectiveness of privacy policy – if the consumer trusts the brand, they will also trust their policies that are given to the consumers.

Price perception, although considered an important factor in literature, does not influence consumer intention to buy, and neither it is influenced by the brand image. Instead, the quality of the product should be increased and the intention to buy will also increase accordingly.

The ever-increasing importance of e-commerce in today's digital era, and a clear understanding of user privacy behavior is extremely important for all digital marketers. It is necessary to understand how some factors such as brand image or even social norms are influencing people's perception of effectiveness of privacy policy and their privacy risk in order to sell a product that is based on providing an answer to problems such as leaked personal information and other privacy threats.

Regardless of the contributions to the literature, this paper does have a few limitations:

1. A major limitation of this research is the chosen research sample, which was convenient sampling. without targeting any specific sample group of respondents, the replication of this study may not be producible on a larger size sample.
2. The type of cybersecurity product and brand could influence user privacy risk perception and intention to buy.
3. The effectiveness of privacy policy is based on Nord VPN's policy itself, which does not accurately represent the users understanding of what an effective privacy policy is.

4. The study would also benefit from examining the effect of social norms and more external factors towards the consumer choice of product.
5. The demographics could possibly influence the perception of the brand, and also the answers could possibly be different, if conducted in a different country, or if the sample was more global.

For further research, it would be highly recommended to conduct the research with a larger sample to fully understand the importance of demographics towards the different variables. It would also be recommended to choose more than one brand of cybersecurity product, with one being generally unknown or even a fake brand, to fully compare the influence of brand image and how it's perceived as well. The next and final section of the thesis will provide further and more detailed recommendations and conclusions of the research.

5. Conclusion and recommendations

In summary, it can be concluded that the research goal and objectives of the thesis have been met and successfully completed. By conducting an extensive literature review, it enabled to analyze the previous research studies done in the field and allowed to detect a research gap. The research gap allowed to conduct this study by also applying insights from other academic authors who have conducted similar studies. Based on those authors, a research model was developed accordingly, and proposed the relationships between the following variables: the positive impact of brand image on intention to buy, perceived price and perceived quality as well as perceived effectiveness of privacy policy. The direct relationship between quality perception and intention to buy. And the direct relationship between perceived effectiveness of privacy policy and intention to buy.

After conducting empirical research, the findings of this study show the importance of brand image and perceived quality towards consumer intention to buy digital products as well. The importance of perceived privacy risk and perceived effectiveness of privacy policy have also been analyzed and showed a greater need of identifying user perceived risks and how they could affect their intention to purchase. What is more, it is important to build on how well is the effectiveness of privacy policy perceived for certain products. A variety of different academic literature authors, depending on the research scope and target show different results of relationship between brand image, price perception and quality perception on intention to buy, however there is a lack of research for digital cybersecurity products that also analyze the relationship of perceived effectiveness of privacy policy and perceived privacy risk with the previous variables. Furthermore, in this study it has been determined that the respondents who answered the questionnaire questions do not perceive Nord VPN as a product that can be completely trusted with user personal information. This is an important insight, as cybersecurity companies should aim towards expanding their customer privacy trust.

Based on the results of the thesis, there are a few recommendations for future research:

1. It would be recommended to repeat the research with a larger sample size, that would have a larger variety of age groups, more importantly: older generations that use cybersecurity products.

2. It is possible that the results of this research could be completely different if another VPN product would be chosen, it would be recommended to do another study with several different VPN brands.,
3. For business research, it is recommended to increase their brand image in general, with focus on brand awareness, trust and reducing the consumer perceived risk of privacy of information breach. The study shows that privacy itself is as important to the consumer as the Brand Image itself, and not the price of the product.
4. It is recommended for digital marketers/marketers of the business to boost the awareness of cybersecurity in general, and how it can help for the future to avoid cyber related privacy risks.
5. The results of this research should not be completely applied without further research. In order to further analyse the relationship between different variables, more research studies should be conducted to get a full understanding of the market and how social norms could also affect the choice.
6. The product chosen – Nord VPN is generally well-known cybersecurity product brand, with extensive and successful marketing campaigns all over the world, especially known in Lithuania as the biggest cybersecurity company/product. For future research, it would be recommended to analyse how a no-name product would affect consumer decision and compare it to other similar brands of products or the same product as Nord VPN.
7. Conducting this research in another company could possibly yield different results, depending on the privacy awareness of the sample.

Although this research has been able to provide valuable contributions and recommendations to the academic literature, it does have several limitations. Firstly, due to a convenience sampling method, the population of the respondents was not completely random, as well as it had variety of respondents from other countries, the results are bound to change accordingly to the sampling technique. Further research should consider a different approach towards the sample. Secondly, the brand that was chosen is generally well known, for further research it can be recommended to conduct with a different brand, or several cybersecurity brands instead.

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Appendices

1. Research Questionnaire

Section 1.

Dear respondent,

I'm a Master's degree student at Vilnius University Business School, who intends to research the impact of brand image, perceived price and perceived quality on consumer intention to buy a cybersecurity product. This means you'll be questioned about your views about a specific product and your willingness to buy it. In addition, different forms of perceived privacy risks will be explored based on that option in order to find differences and factors that may have a final impact on purchasing intention.

The results of this survey are highly important for the academic and business purposes. Please respond to the questions below by selecting the options that best reflect your opinion. Please keep in mind that there are no right or wrong responses; each option simply shows your viewpoint towards that statement.

The author of the study would like to express his appreciation for your participation in this survey, which will help to develop the findings of this study. Your personal information will be kept private and confidential, and it would take no more than 10 minutes of your time to answer the questionnaire.

Thanks for your participation!

Questions:

Would you feel confident answering questions of the survey in the English language?

- a. Yes
- b. No.

Have you previously used any cybersecurity products (VPN's, Proxies etc.)?

- a. Yes
- b. No

How experienced are you with using NordVPN?

- a. Beginner
- b. Intermediate
- c. Advanced

Section 2

The author of the study would like to know each respondent's attitudes and behavior towards a specific cybersecurity brand. Now please imagine that you are buying a VPN service from NordVPN and provide us information on how you agree or disagree with the below-presented statements from 1 to 5, where 1 is "strongly disagree" and 5 is "strongly agree"

Questions:

Please indicate how do you feel towards the following statements based on the Nord VPN's brand image from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. I am aware of this particular product/brand that appeared in the social media.					
2. I can recognize this particular product/brand in comparison with other competing product/brand that appeared in the social media.					
3. This particular product/brand has a different image compared with other products/brands					
4. This particular product/brand is well established.					

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. NordVPN provides prompt services at the promised time					
2. NordVPN handles customer complains effectively					
3. NordVPN gives individual customer attention					

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. Buying NordVPN maybe more expensive than buying other company products.					
2. I will probably save more money buying a different product than NordVPN					
3. It may be possible to get a better discount from another product than NordVPN					
4. It may be cheaper to buy a VPN from NordVPN than any other brand.					

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. Nord VPN is of high quality					
2. The likely quality of NordVPN is extremely high					
3. The likelihood that NordVPN would be functional is very high					
4. The likelihood that NordVPN is reliable is very high					
5. NordVPN must be of good quality					
6. NordVPN appears to be of very poor quality					

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. The probability that I would consider buying NordVPN is high					
2. If I were to buy a cyber-security product, it would be NordVPN					
3. The likelihood of me purchasing NordVPN is high.					
4. My willingness to buy a product from NordVPN is high.					

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. Providing this company (service provider) with my personal information would involve many unexpected problems					
2. It would be risky to disclose my personal information to this company (service provider).					
3. There would be a high potential for loss in disclosing my personal information to this company (service provider).					

Section 3.

Please take your time to familiarize with the Nord VPN's privacy policy statements and answer the questions bellow.

You can find the privacy policy here: <https://my.nordaccount.com/legal/privacy-policy/>

Please provide information on how much you agree with the below statements from 1 to 5, where 1 (strongly disagree) to 5 (strongly agree). *

Questions	1	2	3	4	5
1. I feel confident that NordVPN's privacy statements reflect their commitments to protect my personal information					
2. With their privacy statements, I believe that my personal information will be kept private and confidential by NordVPN.					
3. I believe that the NordVPN's privacy statements are an effective way to demonstrate their commitments to privacy.					

Section 4.

What is your gender?

- a. Male
- b. Female
- c. Prefer no to say
- d. Other

Please indicate your age in years (numbers)

Where are you from?

- a. Lithuania
- b. Other (Please enter where)

What are your religious beliefs?

- a. Catholic/Orthodox
- b. Atheist
- c. Islamic
- d. Other
- e. Prefer not to say

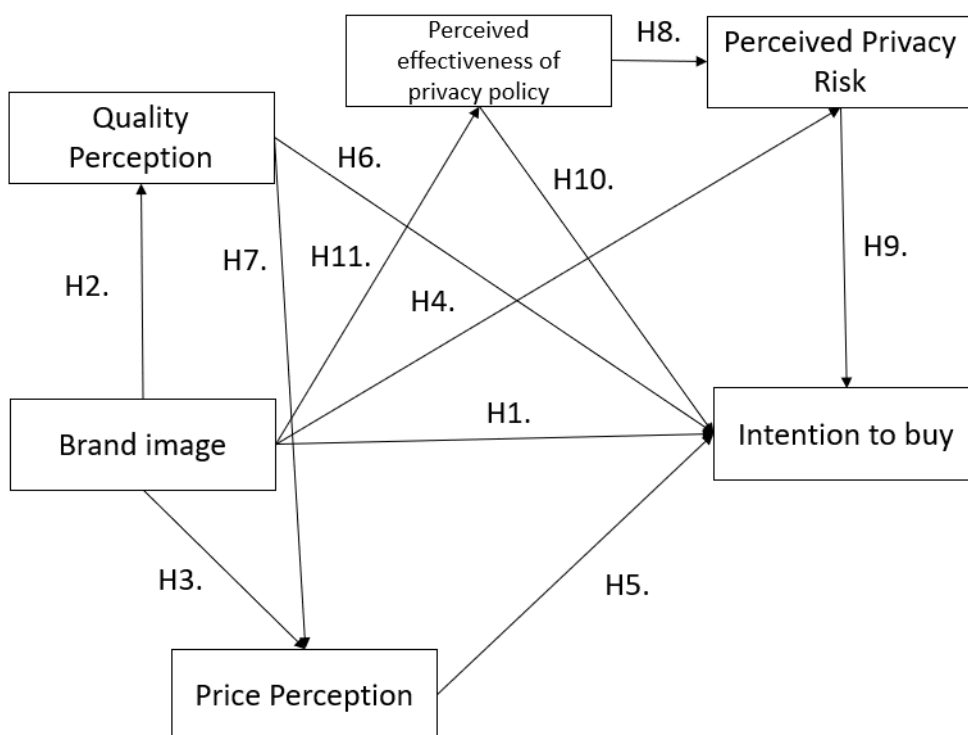
How do you evaluate your income compared to the country's average?

- a. Much lower
- b. A little bit lower
- c. Same as average
- d. A little bit higher
- e. Much higher

What is your monthly personal income?

- a. Less than 500\$
- b. 500-100\$
- c. 1001 – 1500
- d. 1501-2000\$
- e. 2001\$ and more

2. Research Model



3. Empirical research analysis based on SPSS

Table 16. Descriptive Demographic Statistics: Gender and Age

Criteria	Number of Respondents	Percentage	Combined Percentage
Gender			
Male	184	57.3	100
Female	127	39.6	
Other	10	3.1	
Age			
18-21	12	3.7	100
22-25	156	48.6	
26-29	62	19.3	
30-33	76	23.7	
34+	15	4.7	

Table 17. Respondent average income statistics

Average income per month	Number of Respondents
<500\$	4%
501-1000\$	5%
1001-1500\$	24.9%
1501-2000\$	46.1%
2001\$+	19.9%

Table 18. Variable reliability test (Adjusted by removing 1 variable)

Variable	Cronbach's alpha
Brand Image	0.861
Price Perception	0.835
Quality Perception	0.775 → 0.938 (Adjusted)
Intention to buy	0.880
Perceived Privacy Risk	0.931
Perceived Effectiveness of Privacy Policy	0.957

Table 19. Summary of descriptive statistics

	Mean	Standard Deviation
Brand Image	3.8559	0.892
Price Perception	3.3686	0.868

Quality Perception	3.9202	0.815
Intention To Buy	3.5452	0.934
Perceived Privacy Risk	2.8982	1.048
Perceived Effectiveness of Privacy Policy	3.4590	1.037

Table 20. Identification of Correlation Values. Based on Lee, Cho and Kim (2010)

Correlation Value	Correlation Meaning
0.00 – 0.19	Very weak correlation
0.20 – 0.39	Weak correlation
0.40 – 0.59	Moderate correlation
0.60 – 0.79	Strong correlation
<0.80	Very strong correlation

Table 21. Bivariate Correlation between variables using SPSS

		Brand Image	Perceived Price	Perceived Quality	Perceived Privacy Risk	Perceived Effectiveness of Privacy Policy	Intention To Buy
Brand Image	Correlation	1	.075	.667**	.008	.489**	.583**
	Sig. (2-tailed)		.178	<.001	.891	<0.01	<0.01
Perceived Price	Correlation	.075	1	.010	.352**	-.020	.015
	Sig. (2-tailed)	.178		.860	<.001	.727	.793
Perceived Quality	Correlation	.667*	.010	1	.021	.651**	.715**
	Sig. (2-tailed)	<.001	.860		.712	<.001	<.001
	Correlation	.008	.352**	.021	1	.041	.179**

Perceived Privacy Risk	Sig. (2-tailed)	.891	<.001	.712		.462	.001
Perceived Effectiveness of Privacy Policy	Correlation	.489*	-.020	.651**	.041	1	.583**
	Sig. (2-tailed)	<0.01	.727	<.001	.462		<.001
Intention To Buy	Correlation	.583	.015	.715	.179	.583	1
	Sig. (2-tailed)	<0.01	.793	<.001	.001	<.001	
** . Correlation is significant at the 0.001 level (2-tailed)							

(Note: Prepared by the author of the thesis.)

		Brand Image	Perceived Price	Perceived Quality	Perceived Privacy Risk	Perceived Effectiveness of Privacy Policy	Intention To Buy
Monthly Income	Correlation	.072	.135	.063	.096	.009	.120
	Sig. (2-tailed)	.197	.016	.257	.086	.872	.032
** . Correlation is significant at the 0.001 level (2-tailed)							