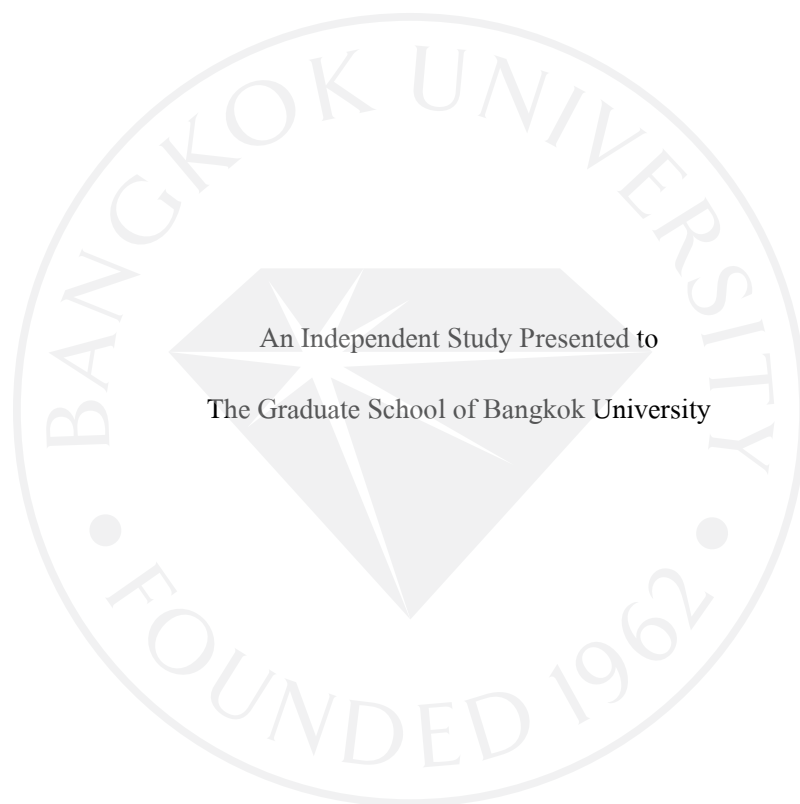# A STUDY OF FACTORS INFLUENCING PURCHASE

DECISION IN AN ONLINE JEWELRY STORE

A STUDY OF FACTORS INFLUENCING PURCHASE DECISION IN AN ONLINE

JEWELRY STORE

An Independent Study Presented to

The Graduate School of Bangkok University

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Risto-Pekka Myllymäki

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A study of factors influencing purchase decision in an online jewelry store (63 pp.)

Advisor of Independent Study Dr. Paul TJ James

ABSTRACT

The objective of this study was to find factors influencing purchase decision in an online jewelry store, in order to help Precium Oy Ltd. to prepare its launch of a web store selling silver jewelry. A quantitative online survey was conducted to Finnish Facebook users, who were connected with the owners of Precium Oy Ltd. Out of 502 questionnaires sent, 206 responses were collected in the time of one week.

The findings of the study indicate that reliability is the most important upper-level factor influencing purchase decision in an online jewelry store. More detailed factors which create reliability were found, such as familiar payment methods, appearance of the online store and third party recommendations.

From the products and services perspective, the appearance of the jewelry was the most important factor influencing purchase decision, among other important factors such as price and material of the product.

The study recommends Precium Oy Ltd. to put effort in creating a web store which has quality looks and pictures presenting the products, and to emphasize in factors influencing reliability in order to create a secure and convenient shopping experience. Some results of the study cannot be generalized to the bigger public but can be seen as trend-setting for the online jewelry business.

Further research on factors concerning usability, interactivity, reliability and aesthetics or even marketing mix of the online jewelry store could be conducted in order to get more detailed information about consumers' needs and interests.

Approved: : _____

       Signature of Advisor

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CHAPTER 1: INTRODUCTION

1.1 Background

Internet has created a new marketplace for many product categories which have traditionally been sold through brick-and-mortar retail stores. Even premium products, which are of high value and have high utility for the consumer, are sold through this new distribution channel of online stores, sometimes called internet stores, e-stores or web stores.

The price of silver has seen a significant growth since 2004. The price has tripled from 6$/ounce in early 2004 to 18.60$ in January 2010 as seen on Chart 1. The boldest predictions suggest that the price could reach 55$ - 65$ per ounce by the end of 2011 (www.goldinfo.net).

Chart 1: Silver Prices from 2004 - 2009

Source: Goldinfo.net 2010

The exceptional increase in the value of silver has also had direct impact on the value of silver jewelry. Consumers perceive silver products as more valuable than before, because of the simple fact that the prices of silver products have increased along with the market price of silver. The increased value of silver has therefore created a direct competitor to gold jewelry products which have always been considered as more valuable than silver jewelry, based on the fact that gold is more expensive as well its long traditions of being the most valuable precious metal, and as an important factor in international trade for centuries.

The growth both in the number of web stores and in the price of silver has created an opportunity to sell silver jewelry as a premium product as well as a long term investment for the future like gold has been sold for many years. This study is carried out in order to find out information about consumers' attitudes towards buying jewelry products online, and to study purchase decision and factors influencing buying jewelry online, as no public studies of these issues were found. The results of the survey will have direct impact on Precium Oy Ltd.'s (Finland) marketing planning, online store design and launch of an online store selling design silver jewelry in Finland.

1.2 Statement of problem

There are quite a few online stores selling jewelry products, and most of the jewelry web stores provide the similar type of products: generic bulk silver and gold jewelry, handmade silver design and gold design jewelry, amateur jewelry, and jewelry from famous jewelry brands. Some of these stores are obviously selling well, some of them are not, or are just self-sufficient, but the real problem no-one has conducted a research on purchase decision and the factors influencing the buying decision of a premium product, especially jewelry, online.

1.3 Intention and reason for study

In order to Precium Oy Ltd., have a successful launch of its online jewelry store, it is important to find information about the factors influencing in online purchase decision, which then can be utilized in the design of the web store and its products and services to meet and match the consumers' behavior, as well as in marketing activities. The more detailed and precise information is gathered, the higher the possibility to have success in the business.

1.4 Research objectives

The objectives of this study are the following:

1. *To determine the factors influencing purchase decision of jewelry online*, in order to understand how to approach the consumers and market the products through efficient methods and channels. The research is interested in detail about the external factors related to the online environment.

2. *To find out attitudes about buying jewelry online*, in order to get an overall attitudes towards online jewelry shops and shopping, of which the information can be used proactively in marketing and website design.

3. *To find thresholds for online purchase decision of jewelry*, in order to lower the threshold through marketing, website design and customer service.

4. *To find out what kind of services are expected and needed from an online jewelry store*, in order to see whether the current online stores are providing all the services needed and to find some extra services which are not found yet, and to better serve the customers' needs.

1.5 Major research question: Sub-question development

The study is approached through a major research question which is divided into detailed sub–questions. The questions and implications of the answers to these questions are based on the research objectives explained in the previous paragraph.

Major research question:

1. What are the factors influencing purchase decision of jewelry online?

Sub-question development:

1. What external/online (technical, website, design, pre etc) factors are important for a consumer's purchase decision online?
2. What kind of consumers are buying online?
3. What are the consumers' attitudes towards purchasing jewelry online?
4. What are the thresholds to purchase jewelry online?
5. What service is expected from an online jewelry store?

1.6 Assumptions

The assumptions, which are taken as granted and not studied or discussed further, of this study are:

- The research method and questionnaire design will be appropriate for the objectives of this study

- The respondents of the study will answer objectively and truthfully based on their attitudes and actual behavior

- The results of the research are valid only for the limited sample group of respondents, and cannot be generalized.

1.7 Scope of research

The scope of this research is to study the attitudes and factors influencing purchase decision and buying behavior in online shopping of jewelry. The target sample group is Finnish internet users who are friends of the owners of the company.

1.8 Benefits of research

The results of this study will be beneficial to Precium Oy Ltd.'s business plan, which is to open an online store selling design silver jewelry in the Finnish markets. The results of the study will help the company to plan and develop a customer oriented online store which has taken into consideration all the important factors that influence the consumers' buying behavior and purchase decision. The results will also allow the company to understand more about consumers service-needs in buying jewelry online, and to develop a proper marketing plan which will lower the threshold of buying jewelry. The results will help Precium Oy Ltd., to gain competitive edge on the current service providers, and to penetrate the markets with a diversified products and services as well as gain sufficient market share.

1.9 Limitations of research

The limitations of this study are:

- Sample group, which is based on the Precium Oy Ltd., owners' social networks (Facebook,), which might affect the answerers' objectivity.

- The results of this study are not valid for the whole target market of online jewelry shoppers, because of the composition of the sample group.

- Due to the limitation of time, this research will try to collect quantitative data through an online questionnaire, which might cause changes in the actual message, depending on the interpretation of the answers.

- All of the respondents' answerers might not have experience about online shopping or online jewelry shopping; therefore the results might be only indicative or trend-setting.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This literature review will discuss four different areas of earlier research, which are important for the study's objectives: **1. E-business environment and e-commerce**, **2. Online buying behavior**, and **3. Factors influencing purchase decision online and 4. Attitudes towards buying online**. The discussion will conclude with a theoretical framework which helps choosing the correct research methodology, design the questionnaire and implementing the study.

"The internet has changed the way people buy, sell, hire, and organize business activities in more ways and more rapidly than other technology in the history of business" (Schneider 2009, p.7). Likewise many historical innovations, such as steam engine and telephone, also internet has proven to have a major impact into business practices and people's lives. Because of internet, the business environment has evolved into a whole new dimension which is often called **e-business or electronic business.** "In fact, as more and more associations of bricks and clicks come about, it will be difficult to distinguish e-business from any other business. All businesses will be e-business once the Internet is incorporated into all companies' mainstream activities" (Costa 2001, p.137).

Consumer buying behavior, before and after the purchase, has differences between traditional shopping and online shopping. A research by Andrews and Currim summarizes that "compared to traditional supermarket consumers, online consumers:

- are less price sensitive
- prefer larger sizes to smaller sizes
- do more screening on the basis of brand names
- do less screening on the basis of sizes
- have stronger choice set effects (i.e., a lower percentage of customers who do no screening)" (Andrews & Currin, 2004).

These results are based on traditional consumer products therefore they might not suit perfectly the topic of this study. However, the results are indicative of the fact that the buying behavior of actual online shoppers differ from the traditional consumers.

The factors influencing the purchase decision differ as well, as the early research by Jarvenpaa and Todd suggests that "World Wide Web merchants need to think more about how they perform on the factors known to affect consumer behavior; namely, product perceptions, shopping experience, and customer service" (Jarvenpaa & Todd, 1996) thus making it important area to study further.

2.2 Discussion

The following discussion will provide detailed literature review of the chosen topics mentioned in previous chapter. It will also provide proper definitions of the versatile terminology used in the areas of the topics. The discussion will conclude with a theoretical framework which helps choosing the correct research methodology and implementing the study.

2.2.1 E-business environment and e-commerce

This study is focused on online shopping behavior, which is a sub-division of e-business, or more closely a sub-division of e-commerce. According to Professor Gary Schneider the words "electronic commerce" means, to many people, shopping on the part of the Internet called the World Wide Web (the Web). Schneider continues the issue by arguing that "Most people use the terms "electronic commerce" and "electronic business" interchangeably" (Schneider 2009, p.5). As there are various interpretations of these definitions it is important to know what this study exactly concentrates on.

"**E-business** encompasses e-commerce, but goes far beyond it to include the application of information technologies for internal business activities in which a company engages during commercial activity. These activities can include functional activities such finance, marketing, human resources management and operations" (Phillips 2003, p.10). This definition brings forward the difference of e-commerce as a sub-division of e-business.

Furthermore, **e-commerce,** or electronic commerce, can be divided into five categories of "business-to-consumer, business-to-business, business processes, consumer-to-consumer, and business-to-government" (Schneider 2009, p.5). Business processes is by far the biggest category of them all by volume and value. Figure 1 demonstrates quite well the division and the difference in size of the second and third biggest categories e-commerce: business-to-business (B2B) and

business-to-consumer (B2C). The latter one is what this study will concentrate on, trying to find information about the factors influencing purchase decision in online shopping.

Figure 1: Elements of electronic commerce
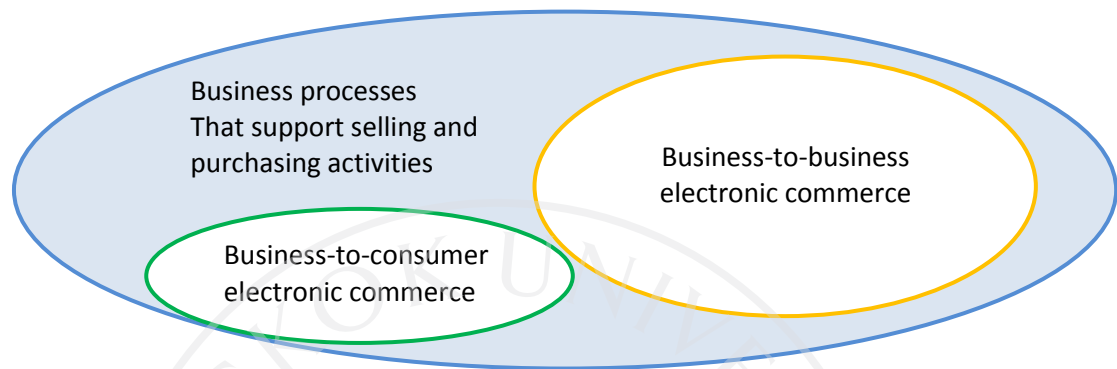
Source: Schneider 2009

2.2.2 Online buying behavior

As mentioned in the Introduction, earlier studies have shown that there are differences between traditional shopping and online shopping behavior. **Consumer behavior** "is the study of how individuals, groups, and organizations select, buy, and dispose of goods, services, ideas, or experiences to satisfy their needs" (Kotler & Armstrong 2009, p.190). The traditional model of consumer below is demonstrated in Figure 2.

Figure 2: Model of Consumer Behavior
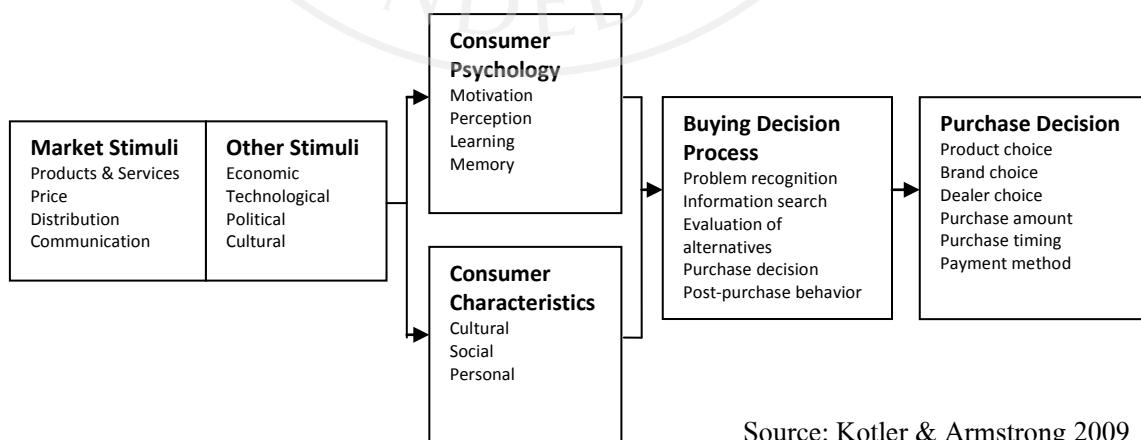
Source: Kotler & Armstrong 2009

This study will focus mainly on *purchase decision* and the factors influencing it. From figure 2. This study will focus on the factors such as *market stimuli* (external for consumer, mostly online

factors in this study) and *consumer characteristics* (internal for consumer, mostly consumer categories), which both influence on attitudes towards shopping. The study will hopefully find differences between the factors and the consumer characteristics. A framework is created later on in this chapter to help understand and reach the objectives of the study.

2.2.3 Factors influencing purchase decision online

Online shopping behavior is based on the traditional shopping behavior, but there are some unique **factors that influence the purchase decision**. Ho and Wu (1999) found out in their research that "there are positive relationships between online shopping behavior and five categories of factors, which include e-stores logistical support, product characteristics, websites technological characteristics, information characteristics, and homepage presentation" (Li & Zhang 2001, p.1).

Consumer satisfaction is important for any company. Cheung and Lee (2005) found out that information quality, system quality, and service quality are the key dimensions of consumer satisfaction in online shopping.

In order to **lower the threshold for buying online**, it is important that the consumer knows who is behind the business. "For some products, such as apparel, increasing a firm's social presence through socially rich descriptions and pictures will have a positive impact on attitudinal antecedents to purchase" (Hassanein & Head, 2006.) The social openness therefore affects the attitudes and should be taken into consideration in any online business.

"Risk was cited as a **barrier** to shopping on the World Wide Web, but was not as salient to our sample as product perceptions, shopping experience, and customer service." (Jarvenpaa & Todd 1996.)

Constantinides (2004) conducted an extensive research based on 48 academic papers which focused on consumer behavior online, and especially on the controllable factors on the buying decision-making process. The factors found in the papers were grouped into three main categories (functionality, psychological, and content factors) and five sub-categories (usability, interactivity, trust, aesthetics, and marketing mix). The division of the categories and sub-categories and the factors within those categories are presented in Table 1.

Table 1: Main categories, sub-categories and the factors influencing purchase decision

Functionality factors		Psychological factors	Content factors	
Usability	**Interactivity**	**Trust**	**Aesthetics**	**Marketing Mix**
Convenience	Customer service/after sales	Transaction security	Design	Communication
Site navigation	Interaction with company	Customer data misuse	Presentation quality	Product
Information	personnel	Customer data safety	Design elements	Fulfillment
architecture	Customization	Uncertainty reducing	Style/atmosphere	Price
Ordering/payment	Network effects	elements		Promotion
process		Guarantees/return		Characteristics
Search facilities and		policies		
process				
Site speed				
Findability/accessibility				

Source: Constantinides 2004

2.2.4 Attitudes towards buying online

The findings of a research on *the impact of personality type on purchasing decisions in virtual stores* demonstrate that "consumer perceptions and attitudes towards virtual stores can be altered by personalizing virtual stores in a manner which will increase their likelihood of making a purchase" (Barkhi & Wallace 2007.) This finding clearly addresses that the attitudes of consumers are important and that they should be manipulated in order to increase purchase. The ways of manipulation are related to the factors influencing purchase decision online, mentioned in the previous chapter.

However, Wu (2007) addresses that attitudes are difficult to change, and that it is important for marketing managers to understand consumer's attitudes towards online shopping, because it can help in predicting the online shopping rate. Later on Wu points out that "attitudes are easier to change than beliefs or values, they are often the focus of marketing efforts to get consumers to buy."

How are attitudes formed then? According to Wu (2007) attitudes are formed through motivation, perception and learning, and that consumers' decisions are based on attitudes. Wu says that "Attitudes serve as the bridge between consumers' background characteristics and the consumption that satisfies their needs. Attitudes describe a person's relatively consistent evaluations, feelings and tendencies toward an object or idea. Attitudes put people into a frame of

mind for liking or disliking things, for moving toward or away from them (Armstrong and Kotler, 2000)" (Wu, 2007).

Figure 3 demonstrates Wu's framework for consumer attitudes and its influence on online shopping. The figure should not be misunderstood as a model for online shopping behavior, but as a model for understanding what influences attitudes towards shopping. Attitudes can be positive or negative based on the consumer characteristics shown in Figure 3.

Figure 3: Consumer characteristics, attitude and online shopping
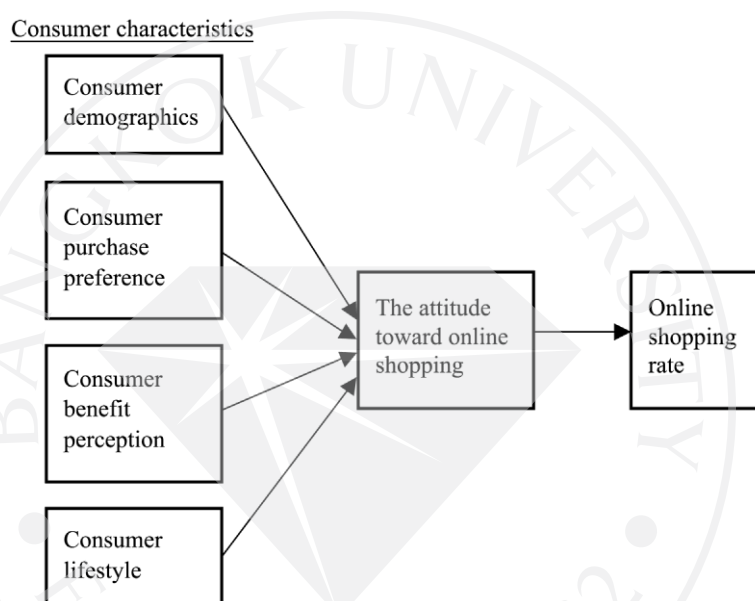
Source: Wu 2007

According to Wu's research, the *consumer benefit perception factors* have positive impact on the attitude, which directly influences purchase rate of an online consumer. This study will use the consumer benefit perception factors in the theoretical framework of the study, as they directly affect the purchase decision. The factors are listed below:

- Effectiveness and modern
- Purchase convenience
- Information abundance
- Multiform and safety
- Service quality
- Delivery speed

- Homepage design
- Selection freedom
- Company name familiarity.

2.3 Conclusion

As a conclusion from the literature review, a theoretical framework is produced and demonstrated below in Figure 4. The framework is a guideline to answering the major research question: "What are the factors influencing purchase decision of jewelry online?"

Figure 4: Theoretical framework for online purchase decision
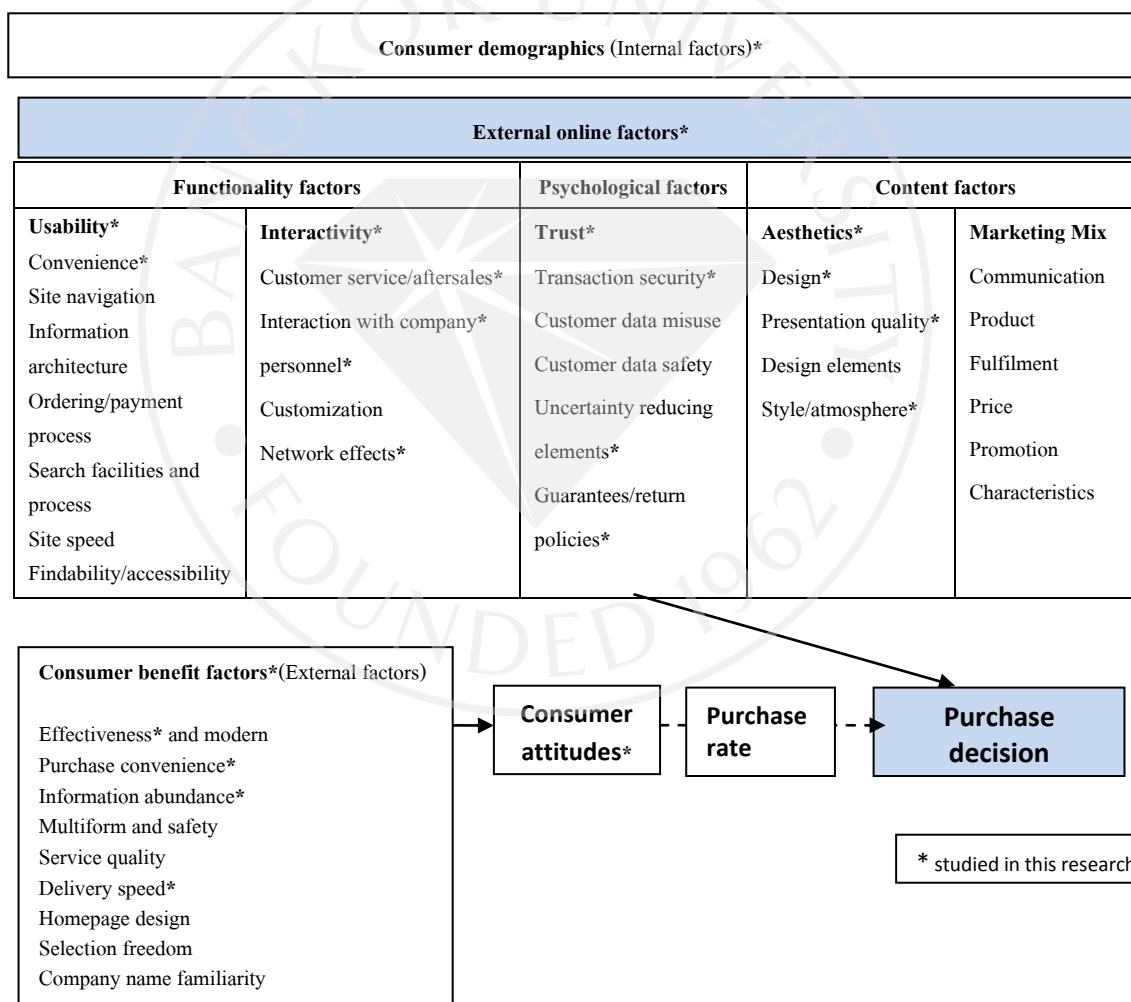
The online consumers are studied based on their demographic information, such as: gender, age, level of education, monthly salary among others. The demographics are called *the internal factors* in this study.

The literature review indicates that the consumers' purchase decisions online are influenced by *external factors* (e.g. market stimuli). This study will focus on some of the external factors and. The focus will be in the upper-level factors or categories *trust*(or reliability) and *aestethics* (or design and visual looks) from Table 1 *Interactivity* and *Usability* are also studied, but not as detailed as the aforementioned.

Online purchase rate is significantly affected my consumer attitudes, therefore the factors influencing the attitudes towards buying online are crucial in studying the purchase decision. These factors are called consumer benefit factors, which can be considered *external factors* as well, because these factors are directly linked to the web store.

Not all of the factors found in the literature review will be included in the study. The factors and categories highlighted with *-sign in Figure 4 will be given most emphasis. This is due to the limitations of time, as well as trying to keep a sharper focus in the study.

When the internal factors (demographics) are combined with the external ones, more detailed knowledge of the both is obtained. This information will be analyzed and used further to help the company to improve its online business. The business implications which come out from this model will be versatile. In brief, the company is expecting to gain valuable information to help its website design, consumer service development, product and service display and design, differentiated and targeted marketing activities, as well lowering the threshold to shop online.

CHAPTER 3: RESEARCH METHODOLOGY

The following chapter gives an overview of research methodology as it is stated in literature and past studies. Precium Oy Ltd.'s needs are linked with its marketing decisions; therefore a marketing research is the correct research for this study. This chapter concludes with the statement of the research methods chosen and used in this study.

3.1 Literature review of research methodology

Aaker et al (2001, p.19) describe marketing research as following: "Market research links the organization with its market environment. It involves the specification, gathering, analysis, and interpretation of information to help management understand that particular market environment, identify its problems and opportunities, and develop and evaluate courses of marketing action."

As seen from the previous quote, the market research has many important steps, therefore it is a process. Zikmund (1997, p.4) quoted the American Marketing Association's definition, which states marketing research as "the systematic and objective process of generating information to aid in making marketing decisions."

Zikmund (1997, p.55) has divided the **research process** into six stages which are:

1. Defining the problem
2. Planning a research design
3. Planning a sample
4. Collecting the data
5. Analyzing the data, and
6. Formulating conclusions and preparing the report

The whole process is displayed as a flowchart in Figure 5.

Figure 5: Flowchart of the Marketing Research Process

Problem Discovery and Definition

Problem discovery

Selection of exploratory research technique

Secondary (historical) data | Pilot Study | Experience Survey | Case study

Problem definition (statement of research objectives)

Research Design

Selection of basic research method

Survey — Interview Questionnaire | Experiment — Laboratory Field | Secondary Data Study | Observation

Sampling

Selection of sample design

Probability | Nonprobability

Data Gathering — Collection of data (fieldwork)

Data Processing and Analysis — Editing and coding data — Data processing

Conclusions and Report — Interpretation of findings — Report

Source: Zikmund 1997

There are three types of **approaches to a research**: **exploratory, descriptive and causal**. These approaches differ "significantly in terms of research purpose, research questions, the precision of hypotheses that are formed, and the data collection methods that are used" (Aaker et al. 2001, p.72).

According to Zikmund (1997), **"Exploratory research** is conducted to clarify the nature of ambiguous problems". For instance, when a business is considering making a change to their business model, but they are not sure whether their decision is correct. Using an exploratory research the company will get a hunch whether its intentions are good or not, and it can follow up with a more detailed research on the possible issues found in the exploratory research.

The purpose of a **descriptive research** is "to provide an accurate snapshot of some aspect of the market environment" (Aaker et al. 2001, p.73) as well as to "describe characteristics of a

population… …Descriptive research seeks to determine the answers to *who, what, when, where,* and *how* questions" (Zikmund 1997, p.51.)

Zikmund's (1997) definition of this approach is "The main goal of **causal research** is to identify caused-and-effect relationships between variables." This means that when there is a need to find information about two variables and if they have any dependence on each other, a causal research is followed through.

Research methods are sometimes divided into two approaches: **quantitative research** and **qualitative research**. "Although there are vast differences between the two approaches, there is no single agreed-on set of factors that distinguishes them as being mutually exclusive" (Hair et al. 2006, p.171) therefore oftentimes a research might have both approaches included.

Quantitative research "places heavy emphasis on using formalized questions and predetermined response options in questionnaires administered to large number of respondents" (Hair et al. 2006, p.171.)

Qualitative research "tends to focus on the collection of detailed amounts primary data from relatively small samples of subjects by asking questions or observing behavior" (Hair et al. 2006, p.173.)

3.2 Research questions

The first stage of the research process is "Problem Discovery and Definition" as displayed earlier in Figure 4. "Careful attention to **problem definition** stage allows the researcher to set the proper research objectives. If the purpose of the research is clear, the chances of collecting necessary and relevant information and omitting surplus information will be much greater" (Zikmund 1997, p.57.) Once the research problem is properly defined it "leads on to setting the research questions" (Hussey and Hussey 1997, p16.)

Ultimately Hair et al. (2006, p.60) propose that "Redefining the problem into a research question is the most critical step in the marketing research process, because how the research problem is defined greatly influences all of the remaining research steps", and that is why it is important to have proper **research question** or questions, as Aaker et al. (2001, p.48) claim that "It is possible to have several research questions for given research purpose."

Research question, according to Aaker et al. (2001, p.48), "asks what specific information is required to achieve the research purpose. If the research question is answered by the research, then the information should aid the decision maker", which means that the research was carried out properly and that it was helpful in finding a solution to the problem.

3.3 Method of inquiry

"After the researcher has formulated the research problem, he or she must develop the research design as part of the **research design stage.** A **research design** in a master plan that specifies the methods and procedures for collecting and analyzing the needed information" (Zikmund 1997, p.60.)

One part of research design is to choose the sources of data, whether it is primary or secondary. Whereas in **primary data sources** the data "are collected especially to address a specific research objective" and "a variety of methods, ranging from qualitative research to surveys to experiments, may be employed", in **secondary data sources** the data is already available. Examples of secondary data sources are:

1. The existing company information system
2. Databanks of other organizations, such as government sources
3. Syndicated data, e.g. consumer purchase panel (Aaker et al. 2001, p.77.)

The researcher will also need to choose the **design technique**, which can be **survey, experiment, secondary data or observation** according to Zikmund (1997, p. 60). Eventually "The objectives of the study, the available data sources, the urgency of the decision, and the cost of obtaining the data will determine which design technique should be chosen" (Zikmund 1997, p.60.)

According to Ziikmund (1997), a **survey** is the most common method of gathering primary data. "A *survey* is a research technique in which information is gathered from a sample of people through questionnaire" (Zikmund 1997, p.61.)

Experiments are "studies in which conditions are controlled so that one or more independent variable(s) can be manipulated to test a hypothesis about a dependant variable" (Aaker et al. 2001, p.331.). Zikmund (1997) states that experiments hold the greatest potential for establishing cause-and-effect relationships.

"An example of a secondary data study is the use of a mathematical model to predict sales on the basis of past sales or a correlation with related variables" (Zikmund 1997, p.62.) Therefore **secondary data** as a design technique relies strongly on data from the past in finding answers to present or future problems.

Observation "may be the least expensive and most accurate method of collecting purely behavioral data such as in-store traffic patterns or traffic passing a certain point on a highway system" (Aaker et al. 2001, p.203.)

3.4 Sampling design

Sampling is an important part of the research process and it is defined as "Selection of a small number of elements from a larger defined target group of elements and expecting that the information gathered from the small group will allow judgments to be made about the larger group" (Hair et al. 2006, p. 308.)

Sampling design is a process which has eight major activities:

1. Identifying the target population
2. Determining the sampling frame
3. Resolving the differences
4. Selecting a sampling procedure
5. Determining relevant sample size
6. Obtaining relevant information from respondents
7. Dealing with the nonresponse public
8. Generating information for decision-making purposes (Aaker et al. 2001, p.364.)

All activities of the sampling design process are illustrated in Figure 6.

Figure 6: The sampling process
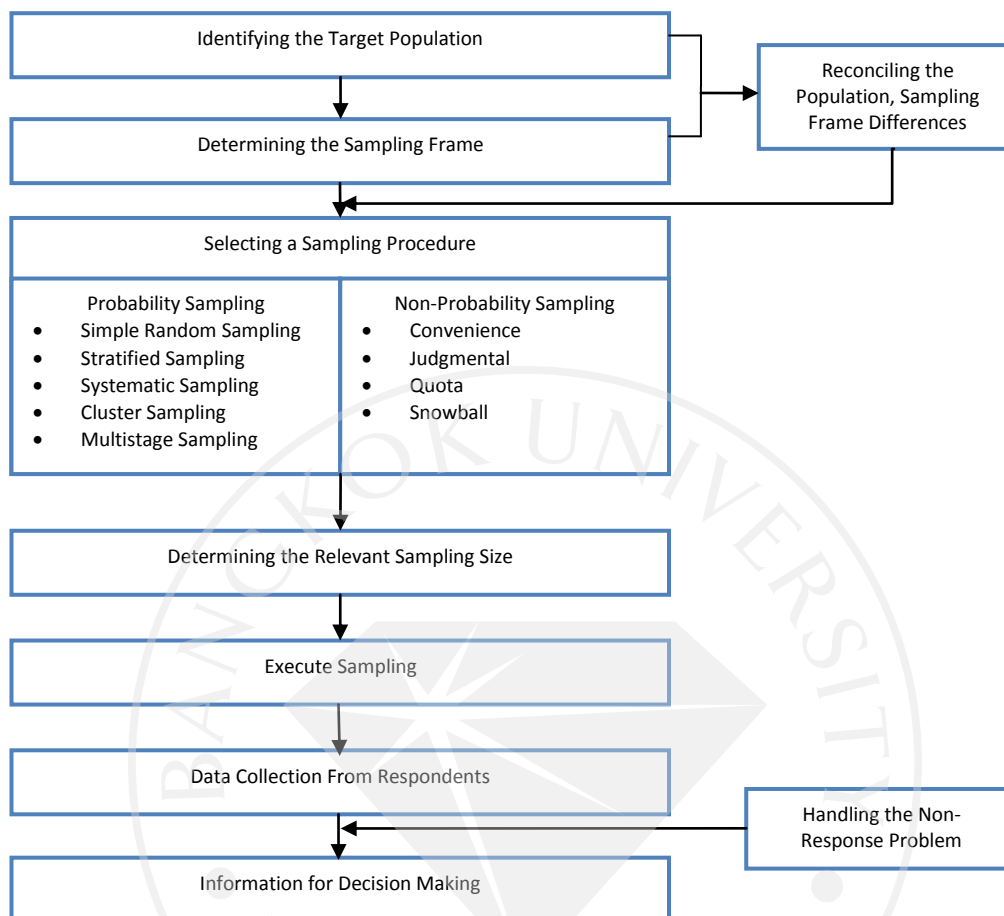
Source: Aaker et al. 2001

3.4.1 Target population

Identifying target population is the base for the sampling and any errors made in this part of the study will have direct impact on the results as Aaker et al put it: "If the population is defined improperly, the research probably will answer the wrong question" (Aaker et al. 2001, p.365.). A **defined target population** can be defined as "the complete group of elements (people or objects) that are identified for investigation based on the objectives of the research project" (Hair et al. 2006, p. 310.)

3.4.2 Sampling frame and resolving differences

Next step in sampling process is determining the **sampling frame**. Sampling frame "is a list of elements from which the sample may be drawn" (Zikmund 1997, p. 416.) Sometimes the sampling frame is called working population. Aaker et al. (2001) define sampling frame as "a list

of population members used to obtain a sample. It might be a list of magazine subscribers, retail hardware stores, or college students; even a map can serve as a list."

Resolving the differences between population and sampling frame is important as there might occur three types of problems: subset, superset and intersection problems (Aaker et al. 2001, p. 371). A **subset** problem happens when the sampling frame is smaller than the population, which means that some of the elements of the population are missing from the sampling frame, and they should be taken into consideration. A **superset** problem takes place when the sampling frame is larger than the population, but it still contains all the elements of the population. This problem can be solved by filtering the sample frame with additional questions. Lastly, the **intersection** problem happens when some elements of the population are missing from the sampling frame, and when the sampling frame has too much elements, which are not in the population. The researcher should try to redefine the population or the research question, in order to solve this problem (Aaker et al. 2001, p. 370.).

3.4.3 Sampling procedure and sample size

Selecting a sampling procedure can be divided into two categories of sampling plans "probability techniques and nonprobability techniques" (Zikmund 1997, p.425) in other words **probability sampling** and **non-probability sampling**. Whereas in **probability sampling** "every element in the population has a *known, nonzero* probability of selection", in **non-probability sampling** "the probability of any particular member of the population being chosen is unknown" (Zikmund 1997, p. 423-424.) Probability sampling consists of five different sampling techniques and non-probability of four, which all are presented in Figure 6.

Sample size "can be determined either by using statistical techniques or through some ad hoc methods. Ad hoc methods are used when a person knows from experience what sample size to adopt or when there are some constraints, such as budgetary constraints, that dictate the sample size" (Aaker et al. 2001, p. 392.) Aaker et al. (2001) also note that sample size calculation is independent of the **size of population**, and that it is a common misunderstanding that a good sample "should include a relatively high percentage of the sampling frame." However, as mentioned earlier, the sample size should not exceed the population, i.e. the *superset* problem. Easy way to find out the sample size is to look at Table 2 which demonstrates the sample sizes

based on two variables: population size and level of precision. The confidence level (95%) and degree of variability (0.5) are constant in the table below.

Table 2: Sample size table

Sample size for ±3%, ±5%, ±7% and ±10% Precision Levels Where Confidence Level is 95% and P=.5.

Size of Population	Sample Size (n) for Precision (e) of:			
	±3%	±5%	±7%	±10%
500	a	222	145	83
600	a	240	152	86
700	a	255	158	88
800	a	267	163	89
900	a	277	166	90
1,000	a	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
10,000	1,000	385	200	99
20,000	1,053	392	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100

a = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Source: University of Florida, Yamane 1967

Calculating sample size exactly according to target population and preferred precision and confidence levels can also be done through the following formula seen in Figure 7.

Figure 7: Formula for calculating sample size

$$\text{Equation 3:} \quad n = \frac{N}{1 + N(e)^2}$$

The variables of the formula are:

- n = sample size
- N = population size
- e^2 = level of precision

3.4.4 Data collection and survey errors

The next step is to **collect relevant data from the respondents** and to **handle the problem of non-response public**. The data collection methods were discussed earlier in this study. In order to gather relevant information, there are some basic mistakes that have to be taken into account. The main sources of **survey errors** are: non-response errors due to refusals, inaccuracy in response, interviewer error (Aaker et al. 2001, p. 217-223.) Internet surveys have some distinct problems. One of them is "selection bias, which occurs when the sample universe is comprised of individuals with the technical skills to use the net and the income to own a PC. This is not a random cross-section of the general population" (Aaker et al. 2001, p. 255.) If an internet based survey is chosen as the data collection method, the responses should be checked carefully, in order to see whether the answer are logically correct and acceptable (Aaker et al. 2001, p.255.)

The last parts of the sampling process as well as the research process are data processing and interpretation and **generating information for decision-making purpose,** which all are discussed in the following topics.

3.5 Coding structure

"After the fieldwork has been completed, the data must be converted into a format that will answer the marketing manager's questions" (Zikmund 1997, p. 66.) Zikmund's statement therefore says that **coding structure** is the step in the research process where the data collected from the respondents is coded into useful data, which then can be decoded and interpreted as information.

Coding and editing are parts of **data processing and analysis** –stage of the research process. Normally data processing begins with editing. **Editing** "involves checking the data collection forms for omissions, legibility, and consistency in classification" and it "helps correcting problems such as interviewer errors" (Zikmund 1997, p. 66.) **Coding** is quite a straightforward process, where the researcher specifies how the responses are to be entered (Aaker et al. 2001.) "Data **coding** involves grouping and assigning values to responses to the questions on the survey instrument. Specifically, coding is the assignment of numerical values to each individual response for each question on the survey" (Hair et al. 2006, p.485.)

3.6 Reporting

Formulating conclusions and preparing the report is the last stage of the research process. In this stage, the processed data will be interpreted and conclusions are made. The conclusions will, if the survey has been conducted properly, be useful for decision making. The report should communicate the research findings, which is not always an easy task to do, as management might not be interested in too detailed information, but want to see the business implications. If no-one reads the report, the reporting stage has failed and the research is vain. When making a report, the importance of good communication of the findings is very important and cannot be overemphasized. (Zikmund,1997.)

3.7 Statement of research method used

This study about purchase decision online will use the following research methods.

3.7.1 Research methodology

This study is a descriptive research, which will use quantitative research approach in order to meet the research objectives through finding the answers to the research questions, which are discussed later on.

3.7.2 Research questions

The research questions, which were developed and discussed in Chapter 1, are based on the research objectives. There is on major research question, which is divided into 5 sub-questions.

Major research question:

1. What are the factors influencing purchase decision of jewelry online?

Sub-question development:

1. What external/online (technical, website, design, usability, etc.) factors are important for a consumer's purchase decision online?
2. What kind of consumers are buying online?
3. What are the consumers' attitudes towards purchasing jewelry online?
4. What are the thresholds to purchase jewelry online?
5. What service is expected from an online jewelry store?

3.7.3 Method of inquiry

This research will collect primary data in order to find the answers to its specific research objectives. The data collecting method chosen for this study is survey. The survey will be conducted with the use of an online questionnaire. See the English version of the survey in Appendix A.

3.7.4 Sampling design

The **Population** for this study is Finnish Facebook users. According to Facebook.com (Figure 8.) there are approximately 1,756,160 users within the population.

Figure 8: Facebook users

Estimated Reach
1,756,160 people
■ who live in **Finland**
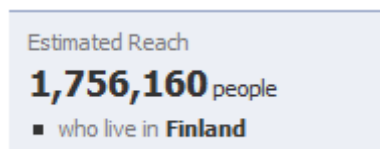
Source: Facebook 2010

The **sampling frame**s for this study are:Facebook-contacts of the owners of the company, and Finnish. This gives the study the **target population** of 502 persons.

This study does not follow the traditional **sampling procedures** explained in the literature review. The reason for this is that the company wants to send the questionnaire to all people in the target population. However the target population, which is the sample group as well, is quite random as friends of the owners tend to have random nature. All of the friends inside the target population are chosen, therefore no sampling occurs. About 70% of the Finnish population uses Facebook, which gives more randomness to the chosen process.

There is no need to calculate the **sample size,** as no sampling occurs. However, in order to get a response which would give statistically significant results with a ±5% level of precision, the study would need at least the following amount of answers, calculated with the formula from Figure 7.:

$$n = 502/ (1 + 502(0.05)^2)$$
$$n = 222.62 \sim 223$$

The expected response rate for this study is at least 44,4%, which is calculated by dividing n (223) by the number of questionnaires sent (502). This gives the expected response rate of 44,4%, which will give the answers a ±5% level of precision. If the response rate is higher or lower, the level of precision can be calculated afterwards, using the same formula presented in Figure 7. The risk of getting lower response than expected has to be taken into account when analyzing the results, as the results cannot be generalized for a larger public, but only for this target group.

3.7.5 Coding structure

The collected data is edited and then coded. The coding structure for the survey questionnaire is in Appendix B.

3.7.6 Reporting

The edited and coded data will be processed with SPSS and Excel-based tools. The descriptive statistics used are mostly frequencies, percentages, means, standard deviations and cross tabulations. The data presentation is in Chapter 4. and the analysis of the data is in Chapter 5.

CHAPTER 4: DATA PRESENTATION

The following chapter will present the data collected through an online questionnaire (Appendix A), which was sent to 502 persons through Facebook-mail. 206 answers were received in one week, which gives a response rate of 41%. The data presentation is divided into six parts which will give answers to the original research questions. The parts are: demographic data, buying behaviour, factors influencing purchase decision, attitudes towards online jewelry stores, thresholds for buying jewelry online, and statements.

4.1 Demographic data

The following data was collected from 206 respondents, from questions 1., 2., 3., 4., 5., and 13. The demographic data consists of frequencies and percentages.

Table Q1: Gender of respondents

1. Gender

	Freq.	%
Male	80	38,8
Female	126	61,2
Total	206	100,0

Chart: Q1 Gender of respondents
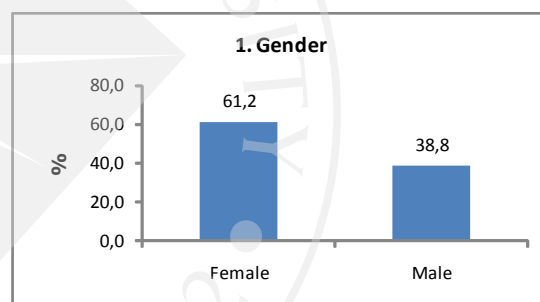
Table Q2: Age of respondents

2. Age

	Freq.	%
Under 20 years	1	0,5
20 – 29 years	101	49,0
30 – 39 years	94	45,6
Over 39 years	10	4,9
Total	206	100,0

Chart: Q2 Age of respondents
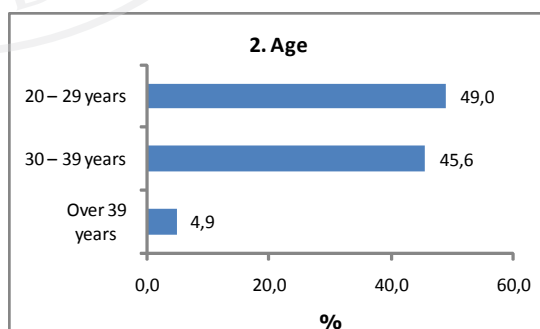
Table Q3: Occupation of respondents

3. Occupation

	Freq.	%
Official	95	46,1
Employee	46	22,3
Managerial level	22	10,7
Student	31	15,0
Entrepreneur	9	4,4
Unemployed	3	1,5
Other	0	0,0
Total	206	100,0

Chart Q3: Occupation of respondents
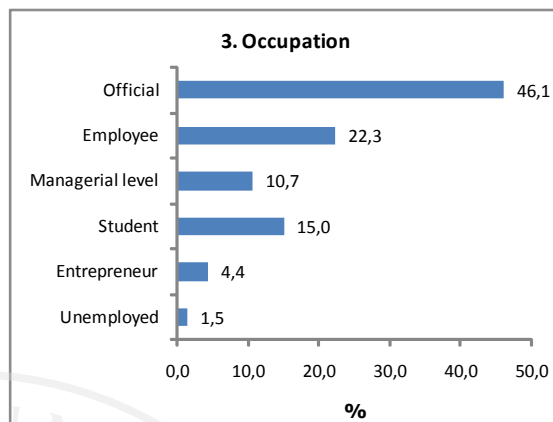
Table Q4: Monthly salary of respondents

4. Monthly salary

	Freq.	%
Under 2000 Euros	49	23,9
2000-4000 Euros	131	63,9
Over 4000 Euros	22	10,7
Can't say	3	1,5
Total	205	100,0

Chart Q4: Monthly salary of respondents
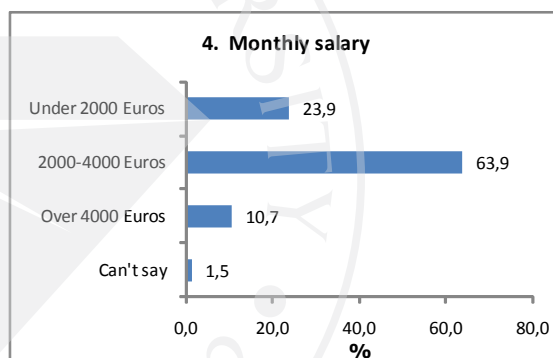
Table Q5: Educational level of respondents

5. Education

	Freq.	%
Primary school degree	9	4,4
High school or equal degree	44	21,5
University, polytechinc or other academic degree	152	74,1
Total	205	100,0

Chart Q5: Educational level of respondents
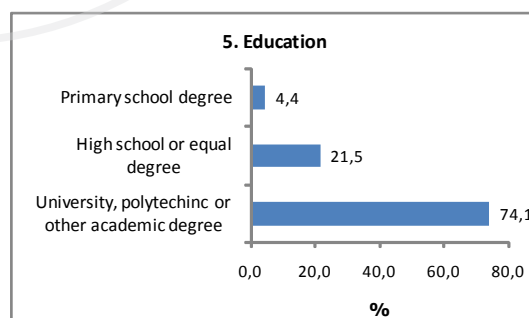
Table Q13.1: Expenditure on jewelry

13. Annual expenditure on jewelry

	Freq.	*%*
0 Euros	24	11,7
1-100 Euros	79	38,3
101-250 Euros	59	28,6
Over 250 euros	44	21,4
Total	206	100,0

Chart Q13.1: Expenditure on jewelry
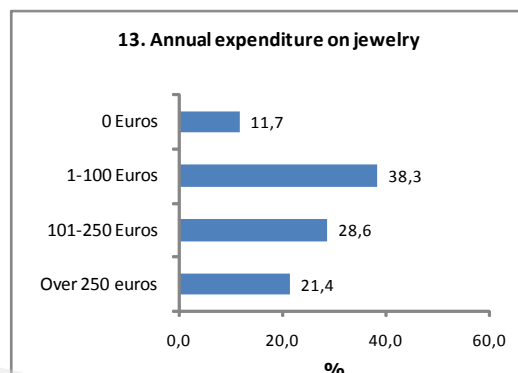
Chart Q13.2: Expenditure and gender
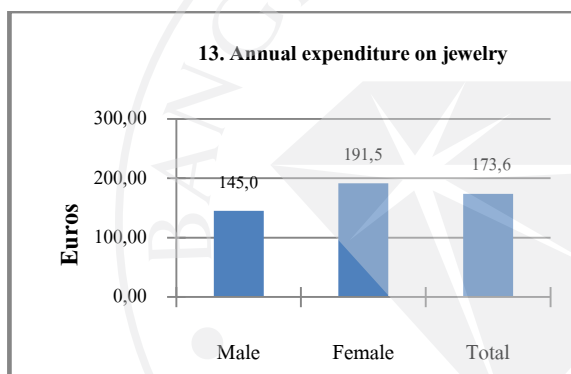
Table Q13.2: Expenditure and gender

Row variable 13. Annual expenditure on jewelry

Column variable: 1. Gender

	Male	*Female*	*Total*
Mean	145,00	191,50	173,60
Total	77	123	200

4.2 Buying behaviour

Below are the frequencies and percentages to question 6. which asks about the buying behavior of the respondents through four sub-questions. The respondents answered on scale: never, not so often, a few times per year, monthly, at least weakly. The answers were cross-tabulated with gender of the respondents. The data consists of frequencies in the tables, and percentages in the charts.

Table Q6.A: Shop online

Row variable: 6. A. How often do you shop online on an average?
Column variable: 1. Gender

	Male	*Female*	*Total*
Never	1	4	5
Not so often	12	21	33
A few times per year	41	59	100
Monthly	22	39	61
At least weekly	4	3	7
Total	80	126	206

p = 0,6965   Statistically not significant

Chart Q6.A: Shop online (%)
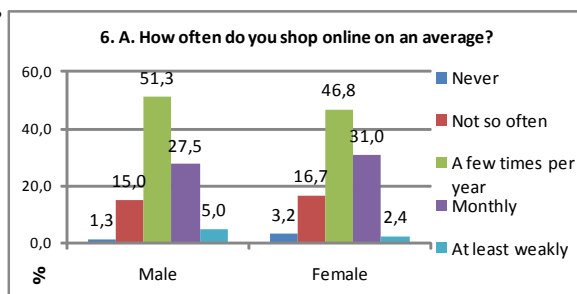
Table Q6.B: Buy jewelry online

Row variable: 6. B. How often do you buy jewelry online on
an average?
Column variable: 1. Gender

	Male	*Female*	*Total*
Never	70	78	148
Not so often	8	32	40
A few times per year	1	10	11
Monthly	0	2	2
At least weekly	0	0	0
Total	79	122	201

p = 0,0013   Statistically significant

Chart Q6.B: Buy jewelry online (%)
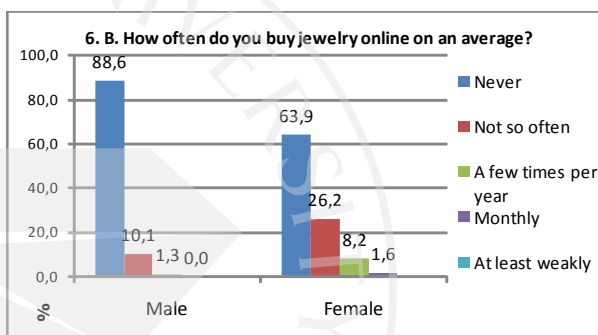
Table Q6.C: Buy jewelry for yourself

Row variable: 6. C. How often do you buy jewelry for yourself on
an average? (not only online, but overall)
Column variable: 1. Gender

	Male	*Female*	*Total*
Never	40	3	43
Not so often	37	42	79
A few times per year	3	57	60
Monthly	0	23	23
At least weekly	0	1	1
Total	80	126	206

p = 0   Statistically very significant

Chart Q6.C: Buy jewelry for yourself (%)
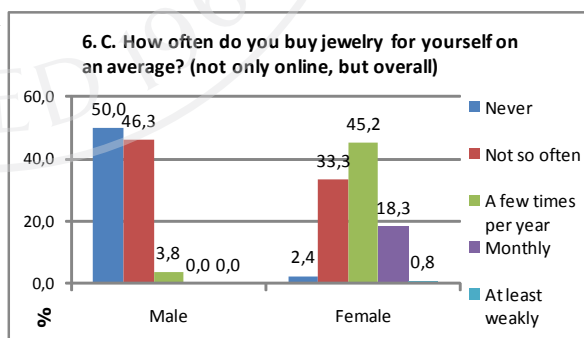
Table Q6.D: Buy jewelry as present

Row variable: 6. D. How often do you buy jewelry as a present?
(not only online, but overall)
Column variable: 1. Gender

	Male	*Female*	*Total*
Never	8	12	20
Not so often	42	70	112
A few times per year	30	43	73
Monthly	0	0	0
At least weakly	0	0	0
Total	80	125	205

p = 0,8829   Statistically not significant

Chart Q6.D: Buy jewelry as present (%)
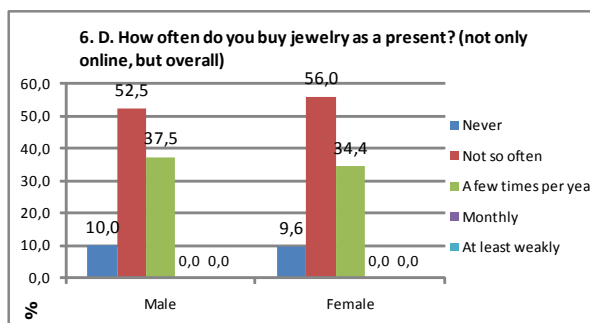
4.3 Factors influencing purchase decision

The data below were collected from questions 7. and 11. Question 7. asks about the influence, of six different factors concerning the product, on the purchase decision of jewelry. Question 11. asks about the influence, of eight different factors, elements or service of online stores, into the purchase decision. The results in the charts Q7 and Q11 demonstrate the mean scores of male and female respondents, as well as the total score. The tables Q7 and Q11 provide frequencies, means and standard deviations of the answers.

Chart Q7: Factors influencing jewelry purchase decision
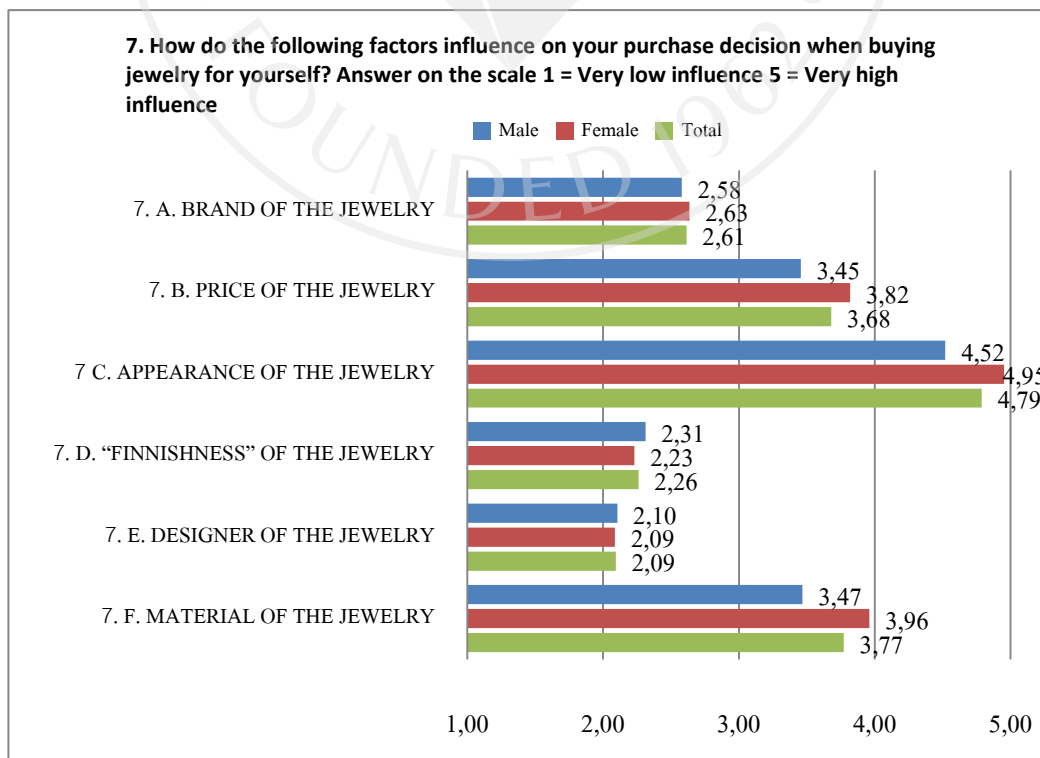
Table Q7: Factors influencing jewelry purchase decision

Row variable: 7. A. Brand of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		23	29	52
	2	15	31	46
	3	15	30	45
	4	17	29	46
Very high influence		6	7	13
Total		76	126	202
Average		2,58	2,63	2,61
Standard deviation		1,34	1,22	1,27

p = 0,76156   Statistically not significant

Row variable: 7. B. Price of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		6	0	6
	2	2	4	6
	3	28	41	69
	4	33	55	88
Very high influence		8	26	34
Total		77	126	203
Average		3,45	3,82	3,68
Standard deviation		0,99	0,79	0,89

p = 0,00458 Statistically significant

Row variable: 7 C. Appearance of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		3	0	3
	2	2	0	2
	3	2	0	2
	4	15	6	21
Very high influence		55	120	175
Total		77	126	203
Average		4,52	4,95	4,79
Standard deviation		0,97	0,21	0,65

p = 0 Statistically very significant

Row variable: 7. D. "Finnishness" of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		22	33	55
	2	17	44	61
	3	30	36	66
	4	8	13	21
Very high influence		0	0	0
Total		77	126	203
Average		2,31	2,23	2,26
Standard deviation		1,00	0,96	0,97

p = 0,56362 Statistically not significant

Row variable: 7. E. Designer of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		27	41	68
	2	23	46	69
	3	20	29	49
	4	6	7	13
Very high influence		1	3	4
Total		77	126	203
Average		2,10	2,09	2,09
Standard deviation		1,02	1,00	1,00

p = 0,90927 Statistically not significant

Row variable: 7. F. Material of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Very low influence		8	1	9
	2	5	8	13
	3	18	27	45
	4	35	48	83
Very high influence		11	41	52
Total		77	125	202
Average		3,47	3,96	3,77
Standard deviation		1,14	0,94	1,05

p = 0,00102 Statistically significant

Chart Q11: Factors influencing purchase decision in online jewelry store

11. How much would the following factors influence on your purchase decision in an online jewelry store? Answer on the scale: 1 = Not at all, 5 = Very much

■ Male ■ Female ■ Total

11. A. DETAILED PRODUCT PICTURES AND INFORMATION ABOUT THE JEWELRY	Male	4,41
	Female	4,81
	Total	4,66
11. B. PICTURES OF PEOPLE WEARING THE JEWELRY	Male	3,18
	Female	3,22
	Total	3,20
11. C. VIDEOS OF PEOPLE WEAREING THE JEWELRY	Male	2,22
	Female	1,94
	Total	2,04
11. D. POSSIBILITY TO DISCUSS WITH THE CUSTOMER SERVCE	Male	3,21
	Female	3,13
	Total	3,17
11. E. INFORMATION ABOUT 14 DAYS RETURN POLICY	Male	4,06
	Female	4,26
	Total	4,19
11. F. EXTENSIVE PRODUCT ASSORTMENT	Male	3,91
	Female	4,12
	Total	4,04
11. G. FITTING TIPS ON THE WEBPAGE	Male	3,28
	Female	3,18
	Total	3,22
11. H. 3D-MODELING (MOVABLE) OF THE JEWELRY	Male	3,51
	Female	3,56
	Total	3,54

1,00   2,00   3,00   4,00   5,00

Table Q11: Factors influencing purchase decision in online jewelry store

Row variable: 11. A. Detailed product pictures and information about the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		2	0	2
	2	1	0	1
	3	4	0	4
	4	28	23	51
Very much		45	101	146
Total		80	124	204
Average		4,41	4,81	4,66
Standard deviation		0,85	0,39	0,64

p = 0,00001 Statistically very significant

Row variable: 11. B. Pictures of people wearing the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		4	4	8
	2	16	30	46
	3	31	39	70
	4	20	40	60
Very much		9	13	22
Total		80	126	206
Average		3,18	3,22	3,20
Standard deviation		1,04	1,03	1,03

p = 0,74927 Statistically not significant

Row variable: 11. C. Videos of people weareing the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		22	46	68
	2	27	47	74
	3	21	26	47
	4	6	6	12
Very much		2	0	2
Total		78	125	203
Average		2,22	1,94	2,04
Standard deviation		1,03	0,88	0,95

p = 0,03847 Statistically weak significance

Row variable: 11. D. Possibility to discuss with the customer
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		5	11	16
	2	14	24	38
	3	28	38	66
	4	25	43	68
Very much		8	10	18
Total		80	126	206
Average		3,21	3,13	3,17
Standard deviation		1,05	1,09	1,07

p = 0,61449 Statistically not significant

Row variable: 11. E. Information about 14 days return policy
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		1	2	3
	2	6	5	11
	3	9	11	20
	4	34	47	81
Very much		29	60	89
Total		79	125	204
Average		4,06	4,26	4,19
Standard deviation		0,95	0,90	0,92

p = 0,13061 Statistically not significant

Row variable: 11. F. Extensive product assortment
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		3	0	3
	2	7	8	15
	3	7	11	18
	4	38	64	102
Very much		23	42	65
Total		78	125	203
Average		3,91	4,12	4,04
Standard deviation		1,05	0,82	0,92

p = 0,11296 Statistically not significant

Row variable: 11. G. Fitting tips on the webpage
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		3	9	12
	2	11	24	35
	3	35	39	74
	4	21	41	62
Very much		9	12	21
Total		79	125	204
Average		3,28	3,18	3,22
Standard deviation		0,97	1,08	1,04

p = 0,52821 Statistically not significant

Row variable: 11. H. 3D-modeling (movable) of the jewelry
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		3	4	7
	2	10	15	25
	3	23	38	61
	4	30	45	75
Very much		13	24	37
Total		79	126	205
Average		3,51	3,56	3,54
Standard deviation		1,04	1,03	1,03

p = 0,74032 Statistically not significant

4.4. Attitudes towards online jewelry stores

Below are results from questions which describe the attitudes of the respondents towards online jewelry stores. Question 9. asks about the importance of the upper level factors of: **usability, interaction, trust**(reliability) and **aestethics**(appearance). Question 12. asks how the respondents perceive the benefits of online jewelry store compared to brick and mortar stores. The charts Q9 and Q12 demonstrate the mean scores of male and female respondents, as well as the total score. The tables Q9 and Q12 provide frequencies, means and standard deviations of the answers.

Chart Q9: Importance of upper-level factors for online jewelry store

9. If you would buy from an online jewelry store, how important would you perceive the following factors. Answer on the scale 1 = Completely unimportant 5 = Very important
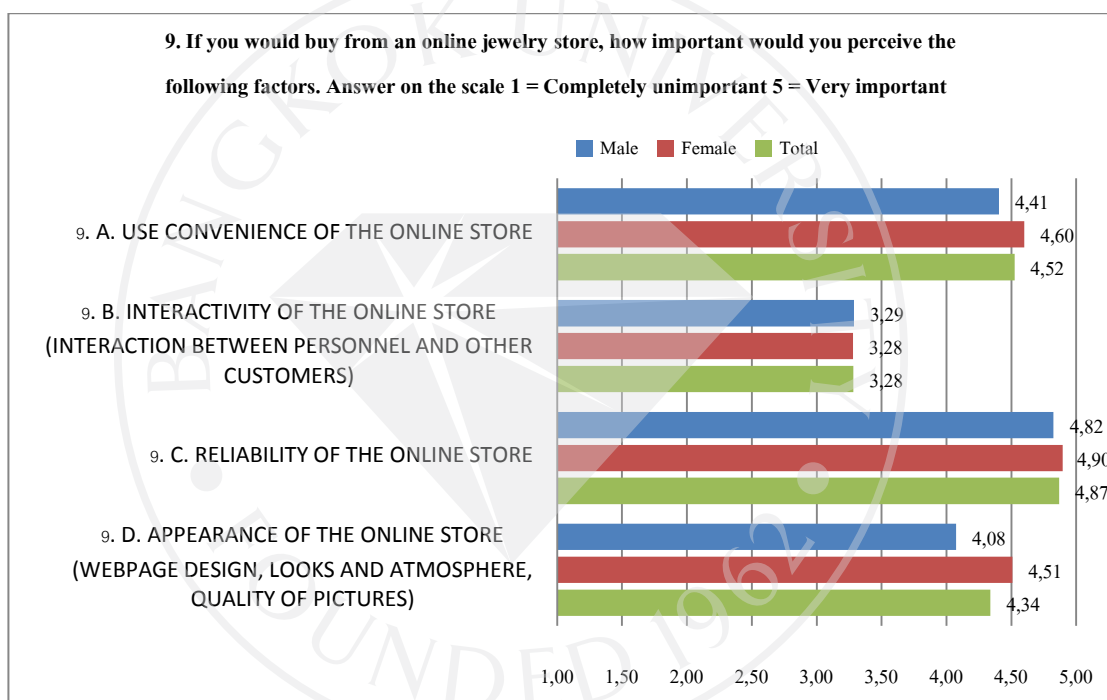
Table Q9: Importance of upper-level factors for online jewelry store

Row variable: 9. A. Use convenience of the online store

Column variable: 1. Gender

Frequency		Male	Female	Total
Completely unimportant		0	0	0
	2	1	0	1
	3	1	0	1
	4	42	50	92
Very important		35	75	110
Total		79	125	204
Average		4,41	4,60	4,52
Standard Deviation		0,59	0,49	0,54

p = 0,01144 Statistically weak significance

Row variable: 9. B. Interactivity of the online store
(interaction between personnel and other customers)

Column variable: 1. Gender

Frequency		Male	Female	Total
Completely unimportant		4	5	9
	2	14	26	40
	3	25	33	58
	4	29	51	80
Very important		8	10	18
Total		80	125	205
Average		3,29	3,28	3,28
Standard Deviation		1,03	1,01	1,02

p = 0,95913 Statistically not significant

Row variable: 9. C. Reliability of the online store

Column variable: 1. Gender

Frequency		Male	Female	Total
Completely unimportant		1	0	1
	2	0	0	0
	3	0	0	0
	4	10	13	23
Very important		69	112	181
Total		80	125	205
Average		4,83	4,90	4,87
Standard Deviation		0,55	0,31	0,42

p = 0,23509 Statistically not significant

Row variable: 9. D. Appearance of the online store
(webpage design, looks and atmosphere, quality of pictures)

Column variable: 1. Gender

Frequency		Male	Female	Total
Completely unimportant		1	0	1
	2	2	0	2
	3	8	4	12
	4	48	53	101
Very important		21	67	88
Total		80	124	204
Average		4,08	4,51	4,34
Standard Deviation		0,76	0,56	0,68

p = 0,00001 Statistically very significant

Chart Q12: Attitudes towards the benefits of online jewelry store

12. How do you perceive the following characteristics of an online jewelry store, compared to a brick and mortar store? Rate the benefits of online stores listed below on the scale: 1 = Completely unimportant, 5 = Very important
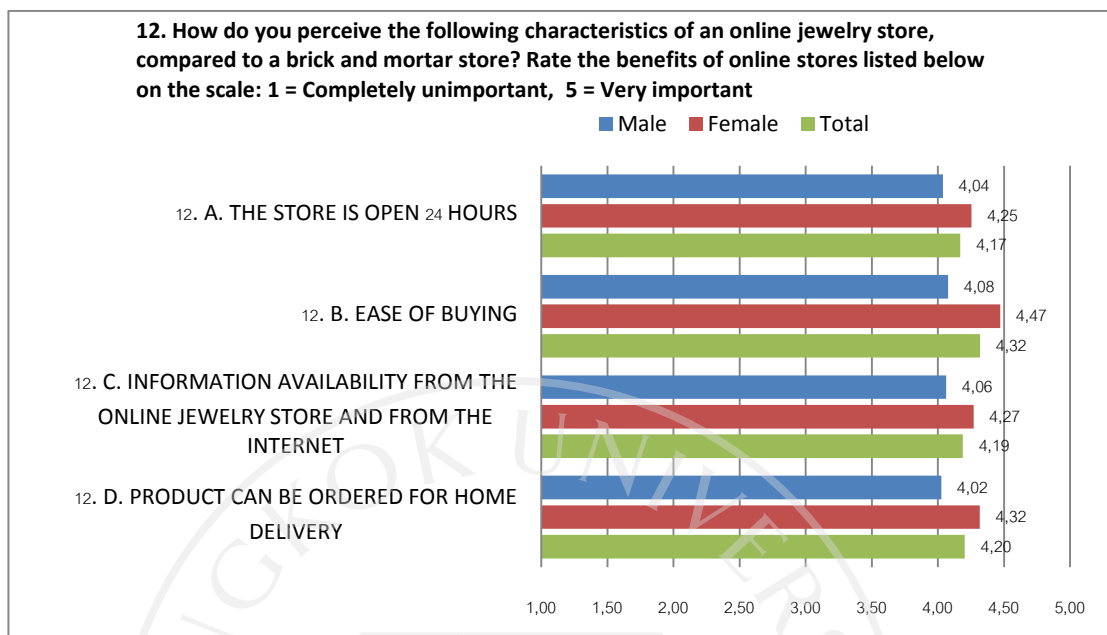
Table Q12: Attitudes towards the benefits of online jewelry store

Row variable: 12. A. The store is open 24 hours
Column variable: 1. Gender

Frequency	Male	Female	Total
Completely unimportant	2	1	3
2	6	4	10
3	15	14	29
4	21	50	71
Very important	36	57	93
Total	80	126	206
Average	4,04	4,25	4,17
Standard deviation	1,08	0,84	0,94

p = 0,10925 Statistically not significant

Row variable: 12. B. Ease of buying
Column variable: 1. Gender

Frequency	Male	Female	Total
Completely unimportant	2	0	2
2	5	3	8
3	10	5	15
4	30	47	77
Very important	32	70	102
Total	79	125	204
Average	4,08	4,47	4,32
Standard deviation	1,01	0,69	0,85

p = 0,00105 Statistically significant

Row variable: 12. C. Information availability from the online jewelry store and from the internet
Column variable: 1. Gender

Frequency	Male	Female	Total
Completely unimportant	1	0	1
2	4	4	8
3	13	9	22
4	33	62	95
Very important	29	51	80
Total	80	126	206
Average	4,06	4,27	4,19
Standard deviation	0,92	0,73	0,81

p = 0,07448 Statistically almost significant

Row variable: 12. D. Product can be ordered for home deliver
Column variable: 1. Gender

Frequency	Male	Female	Total
Completely unimportant	2	1	3
2	8	4	12
3	11	11	22
4	24	48	72
Very important	35	62	97
Total	80	126	206
Average	4,03	4,32	4,20
Standard deviation	1,10	0,83	0,95

p = 0,03113 Statistically weak significance

4.5. Thresholds for buying jewelry online

Question 10. asked the respondents about the factors influencing reliability of an online jewelry store. Chart Q10 demonstrates the mean scores of male and female respondents, as well as the total score. Table Q10 provides frequencies, means and standard deviations of the answers.

Chart Q10: Reliability factors

Table Q10: Reliability factors

Row variable: 10. A. Pictures and information about the people behind the company
Column variable: 1. Gender

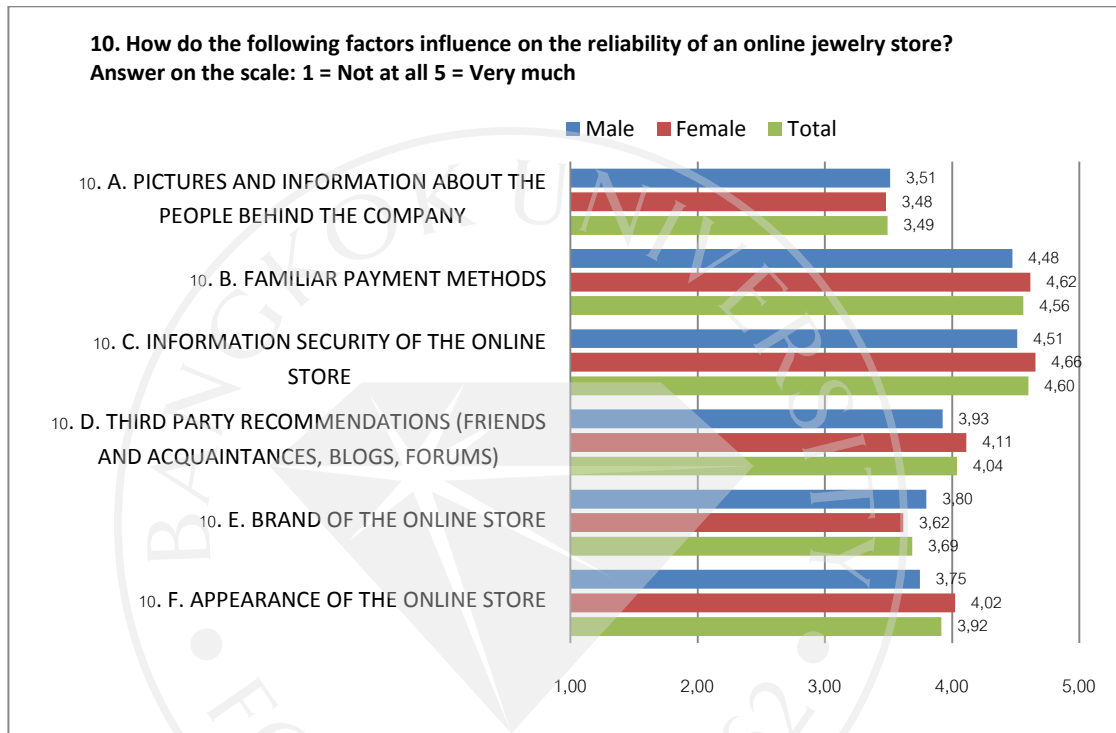| Frequency		Male	Female	Total
Not at all		3	5	8
	2	13	21	34
	3	17	23	40
	4	34	61	95
Very much		13	15	28
Total		80	125	205
Average		3,51	3,48	3,49
Standard deviation		1,07	1,04	1,05

p = 0,82883 Statistically not significant

Row variable: 10. B. Familiar payment methods
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		1	0	1
	2	1	0	1
	3	2	3	5
	4	31	42	73
Very much		45	80	125
Total		80	125	205
Average		4,48	4,62	4,56
Standard deviation		0,73	0,54	0,62

p = 0,11257 Statistically not significant

Row variable: 10. C. Information security of the online store
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		1	0	1
	2	0	2	2
	3	7	3	10
	4	21	31	52
Very much		51	89	140
Total		80	125	205
Average		4,51	4,66	4,60
Standard deviation		0,76	0,61	0,68

p = 0,13851 Statistically not significant

Row variable: 10. D. Third party recommendations (friends and acquaintances, blogs, forums)
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		1	0	1
	2	4	4	8
	3	20	16	36
	4	30	67	97
Very much		25	38	63
Total		80	125	205
Average		3,93	4,11	4,04
Standard deviation		0,94	0,74	0,83

p = 0,11471 Statistically not significant

Row variable: 10. E. Brand of the online store
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		1	0	1
	2	2	12	14
	3	26	41	67
	4	33	55	88
Very much		17	17	34
Total		79	125	204
Average		3,80	3,62	3,69
Standard deviation		0,85	0,84	0,85

p = 0,13682 Statistically not significant

Row variable: 10. F. Appearance of the online store
Column variable: 1. Gender

Frequency		Male	Female	Total
Not at all		2	0	2
	2	5	2	7
	3	17	23	40
	4	42	68	110
Very much		13	30	43
Total		79	123	202
Average		3,75	4,02	3,92
Standard deviation		0,90	0,71	0,80

p = 0,0153 Statistically weak significance

4.6. Statements

Question 8. asked the respondents to answer to ten different statements, varying from buying behavior into various factors important to online stores. Chart Q8. demonstrates the mean scores of male and female respondents, as well as the total score. Tables Q8.1 and Q8.2 provide frequencies, means and standard deviations of the answers.
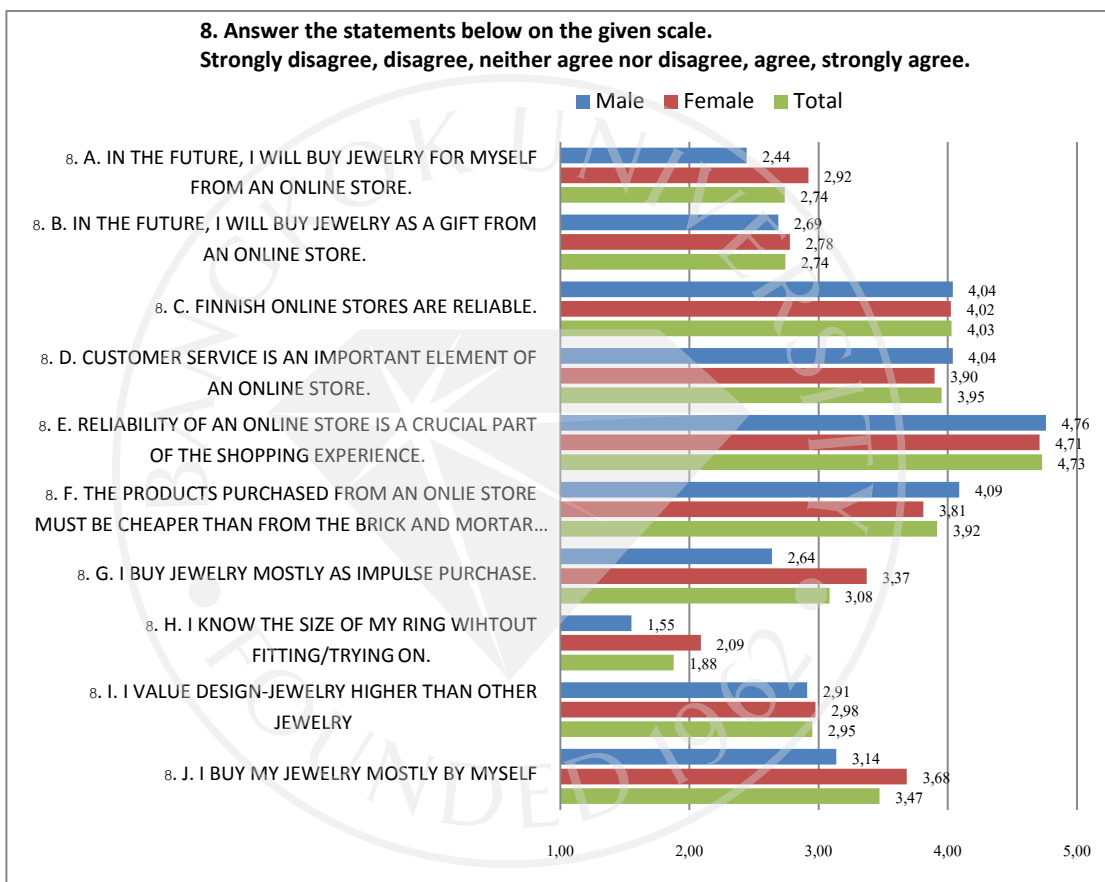
Chart Q8: Statements

Table Q8.1: Statements

Row variable: 8. A. In the future, I will buy jewelry for myself from an online store.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	20	14	34
Disagree	18	21	39
Neither agree nor disagree	28	57	85
Agreee	12	29	41
Strongly agree	1	5	6
Total	79	126	205
Average	2,44	2,92	2,74
Standard deviation	1,07	1,00	1,05

p = 0,00142 Statistically significant

Row variable: 8. B. In the future, I will buy jewelry as a gift from an online store.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	16	12	28
Disagree	16	32	48
Neither agree nor disagree	28	57	85
Agreee	17	22	39
Strongly agree	3	3	6
Total	80	126	206
Average	2,69	2,78	2,74
Standard deviation	1,13	0,93	1,01

p = 0,53335 Statistically not significant

Row variable: 8. C. Finnish online stores are reliable.

Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	1	0	1
Disagree	1	2	3
Neither agree nor disagree	8	19	27
Agreee	54	79	133
Strongly agree	16	26	42
Total	80	126	206
Average	4,04	4,02	4,03
Standard deviation	0,68	0,65	0,66

p = 0,88538 Statistically not significant

Row variable: 8. D. Customer service is an important element of an online store.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	1	1	2
Disagree	5	8	13
Neither agree nor disagree	11	27	38
Agreee	36	57	93
Strongly agree	27	33	60
Total	80	126	206
Average	4,04	3,90	3,95
Standard deviation	0,92	0,89	0,90

p = 0,2774 Statistically not significant

Row variable: 8. E. Reliability of an online store is a crucial part of the shopping experience.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	0	0	0
Disagree	1	0	1
Neither agree nor disagree	1	1	2
Agreee	14	34	48
Strongly agree	63	89	152
Total	79	124	203
Average	4,76	4,71	4,73
Standard deviation	0,54	0,47	0,50

p = 0,48849 Statistically not significant

Row variable: 8. F. The products purchased from an online store must be cheaper than from the brick and mortar store.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	1	0	1
Disagree	4	12	16
Neither agree nor disagree	14	29	43
Agreee	29	56	85
Strongly agree	32	29	61
Total	80	126	206
Average	4,09	3,81	3,92
Standard deviation	0,94	0,90	0,93

p = 0,03532 Statistically almost significant

Table Q8.2: Statements (continued)

Row variable: 8. G. I buy jewelry mostly as impulse purchase.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	15	7	22
Disagree	23	26	49
Neither agree nor disagree	21	23	44
Agreee	18	50	68
Strongly agree	3	18	21
Total	80	124	204
Average	2,64	3,37	3,08
Standard deviation	1,14	1,14	1,19

$p = 0,00001$ Statistically very significant

Row variable: 8. H. I know the size of my ring wihtout fitting/trying on.
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	53	47	100
Disagree	18	51	69
Neither agree nor disagree	3	6	9
Agreee	4	14	18
Strongly agree	2	8	10
Total	80	126	206
Average	1,55	2,09	1,88
Standard deviation	0,97	1,20	1,14

$p = 0,0009$ Statistically very significant

Row variable: 8. I. I value design-jewelry higher than other jewelry
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	15	11	26
Disagree	12	39	51
Neither agree nor disagree	24	28	52
Agreee	21	36	57
Strongly agree	7	11	18
Total	79	125	204
Average	2,91	2,98	2,95
Standard deviation	1,24	1,15	1,18

$p = 0,70467$ Statistically not significant

Row variable: 8. J. I buy my jewelry mostly by myself
Column variable: 1. Gender

Frequency	Male	Female	Total
Strongly disagree	12	4	16
Disagree	9	19	28
Neither agree nor disagree	27	12	39
Agreee	20	69	89
Strongly agree	12	22	34
Total	80	126	206
Average	3,14	3,68	3,47
Standard deviation	1,25	1,03	1,15

$p = 0,00082$ Statistically very significant

4.7 Conclusion

The results from the survey questionnaire were presented in this chapter, by the means of simple descriptive statistics presented in charts and tables. Chapter 5. will analyze the most important results and findings, especially targeted for the objectives and research questions of the study.

CHAPTER 5: DATA ANALYSIS

The following chapter will analyze the data previously presented in Chapter 4. Most of the demographic data is presented in order to get an overview of the respondents. From the other parts of data collected, only the most important and relevant findings for this study will be analyzed. The data from topic 4.6 *Statements* will be analyzed under various topics in this chapter, depending on the statement.

5.1 Analysis of response rate and demographics

The **response rate** of 41% in this study was lower than the expected 44,4%. That is why the results cannot bet generalized for bigger public, but can be used to analyse this specific target group. The reader and the company should therefore understand that there are risks in making strategic business decision based on the results.

Out of 206 respondents to the survey, 126 were female (61,2%) and 80 (38,8%) were male (Table and Chart Q1). The age of the respondents were divided into two big groups: 20-29 years (49%), and 30-39 years (45,6%) (Table and Chart Q2).

Most of the respondents were in working: almost half (46,1%) were *Officials*, the second biggest group was *Employees* (22,3%), and 15% of the respondents were students (Table and Chart Q3).

63,9% of the respondents' **monthly salary** was between 2000-4000 Euros, 10,7% earn more than 4000 Euros, and 23,9% earn less than 2000 Euros per month. Half (25 persons) of the group who earn less than 2000 per month were students (Table and Chart Q4).

The **level of education** of the respondents was 74,1% *University, polytechnic or other academic degree.* 21,5% had a degree from high school or other institution of the equal level (Table and Chart Q5).

The **annual expenditure on jewelry** was on average 173,6 Euros per head. Men spent annually 145 Euros, which was far less than women, who spent 191,5 Euros per year. Almost half of the respondents spend 100 Euros or less. The biggest single amount spent was 1,000 Euros (Tables and Charts Q13.1 and Q13.2).

5.2 Analysis of buying behaviour

Almost half, 100 respondents out of 206, **shop online** *a few times per year*. One third (67 out of 206) of respondents shop online *monthly* or more often (Table and Chart Q6.A).

Almost 75 percent (148 out of 201) of the respondents have never **bought jewelry from an online store.** 88,6% of men and 63,9% of women have never bought jewelry online (Table and Chart Q6.B).

According to Table and Chart Q6.C, 50% of men have never **bought a jewelry for themselves** (not only online, but overall), and 46,3% of men buy jewelry less than *a few times per year*. 45,2% of women buy jewelry *a few times per year* and 18,3% *monthly*. However, third of women responded to buy jewelry *not so often*.

A little over third of both men and women **buy jewelry as a present** *a few times per year* (Table and Chart Q6.D).

Some of the statements in question 8. discussed about buying behavior. Respondents were asked to answer the statements on the scale: strongly disagree to strongly agree. Statement 8.A. *In the future, I will buy jewelry for myself from an online store* scored 2,92 from women, 2,44 from men and 2,74 on average.

Statement 8.B. *In the future, I will buy jewelry as a gift from an online store* scored 2,78 from women, 2,69 from men and 2,74 on average.

Statement 8.G. *I buy jewelry mostly as impulse purchase* scored a bit higher from female respondents (3,37), compared to male (2,64). The average score was 3,08.

Statement 8.J. *I buy my jewelry mostly by myself* scored 3,68 from women, 3,14 from men, and 3,47 on average.

5.3 Analysis of factors influencing purchase decision

Chart Q7 Factors influencing jewelry purchase decision shows clearly a few important findings for the research. Firstly, *the appearance of the jewelry* **was the most important factor**, which had the mean score of 4,79, on the scale of 1=very low influence, 5=very high influence. The next two important factors were *material of the jewelry* (3,77) and *price* (3,68).

The **least important factors** were *Designer* and *"Finnishness"* followed with *Brand of the jewelry*, with the scores of 2,09, 2,26, and 2,61 respectively. It is important to note that *Brand of the jewelry* had the highest standard deviation of 1,27. This is a sign that there are people who give importance to the brand (around 29%), and people who do not give that much importance (around 48%) to the brand, and people in between (around 23%). **The differences between average scores of men and women were relatively low in every factor.**

Chart Q11: Factors influencing purchase decision in online jewelry store depicts that the **highest influence for the purchase decision** in an online jewelry store, from the eight factors asked, was *detailed product pictures and information about the jewelry*, with the mean score of 4,66.

The second highest score was quite surprising; *information about 14 days return policy,* which scored 4,19. This result reflects the fact that people might not be aware of the consumer law, which actually states that there is a 14 days return policy. *Extensive product assortment* had a high influence, scoring 4,04.

Possibility to discuss with the customer service received a mean score of 3,17. *Videos of people wearing the jewelry* received **the lowest mean score** of 2,04.

Some of the statements in question 8. discussed about factors influencing purchase decision. Even though *possibility to discuss with the customer service* received a medium score in question 11.D., statement 8.D. *Customer service is an important element of an online store* received a mean score of 3,95. Perhaps these results imply that, customer service is expected, but not the most important factor for purchase decision.

The mean score of 3,92 from statement 8.F. *The products purchased from an online store must be cheaper than from a brick and mortar store* implies that **people are looking for a better deal online.** Almost 75% of the respondents replied *agree* or *strongly agree.*

5.4 Analysis of attitudes towards online jewelry stores
Chart Q9: Importance of upper-level factors for online jewelry store illustrates how the respondents perceive online jewelry store's usability, interactivity, reliability and aesthetics. The

answers demonstrate what aspects the respondents see important for an online jewelry store, which reflects the respondents' attitudes and perceptions.

Based on the results, *reliability of the online store* **was the most important for the respondents**, with mean score of 4,87. This can be interpreted in the following way: in order for the consumer to buy from the store, he or she has to feel secure and safe; this feeling is based on the reliability perceived from the web store. What are the factors that create reliability? It is found in later analysis of the results.

The lowest score was on *interactivity* (3,28) which could reflect an attitude such as "online stores are not interactive", which is quite natural if people compare online store to a brick and mortar one.

Chart Q12: Attitudes towards the benefits of online jewelry store shows that all of the scores were very positive, not surprisingly though, as all of the benefits are direct benefits for the consumer. **The highest score was** *ease of buying* (4,32). This reflects the attitude that online jewelry shopping is convenient, and that the shopping process is easy. **There were no low scores**, as all of the four benefits asked received minimum average score of 4,17.

5.5 Analysis of thresholds for buying jewelry online

Reliability was found to be very important for the consumer in an online jewelry store. Therefore if the store does not appear reliable or give a trustworthy image to consumers, it is the biggest threshold or barrier to buy online. "Risk" was also mentioned a few times in the literature review of factors affecting purchase decision.

Question 10. asked the consumer to give scores about the factors influencing the reliability of the online stores. **Chart Q10: Reliability factors**, illustrates how consumers scored the factors. **The highest mean scores were** *information security of online store* **(4,60) and** *familiar payment methods* (4,56), followed by *third party recommendations* (4,04) and *appearance of the online store* (3,92).

The lowest score given was for *pictures and information about the people behind the company*, which got the mean score of 3,49, making it important as well. Therefore all of the factors are

important for the online store, but the company should put more emphasis providing and showing that the familiar payment methods are available.

Some of the statements in question 8. discussed about reliability. Statement 8.C. *Finnish online stores are reliable* scored 4,03, on the scale: strongly disagree to strongly agree. Statement 8.E. *Reliability of an online store is a crucial part of the shopping experience* scored 4,73 (Chart Q8). These answers imply that the target group trusts Finnish online stores and perceive reliability to be very important for a comfortable and secure shopping experience.

5.6 Services expected from an online store

Some of the questions in the survey were associated with **services of an online jewelry store**. This chapter gives an insight for the most interesting findings. Statement 8.I. ***I know the size of my ring without fitting/trying on* received a mean score of 1,88,** implying that people mostly don't know their ring size (Chart Q8). Therefore fitting service and tips should be included in an online jewelry store, as it received a mean score of 3,22 in question 11.G. (Chart Q11).

The mean score of 4,56 from question 10.C. asking about *Familiar payment methods* implies that there must be a variety of payment methods available, so that the customer can choose the one they are most familiar with, and the one that they trust and see as a reliable paying method (Chart Q10).

The possibility to discuss with customer service could be a service which might have effect on the final purchase decision, as seen from the mean score of 3,17 in question 11.D. (Chart Q11). Oftentimes consumers want to ask questions, especially online, and this might be a good solution to finalize the deal. *Customer service* was also seen as an important element of an online store, with a mean score of 4,03 in question 8.C. (Chart Q8).

5.7 Conclusion

The data presented in Chapter 4. was analyzed in this chapter. Only the relevant results for this study were analyzed and discussed briefly. The most important findings will be discussed, and business implications and recommendations will be given, in the following chapter.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

This chapter will conclude the study with summary and discussion about the study. The chapter will present a summary of the most important and concrete findings and give recommendations on business implications for Precium Oy Ltd.

6.1 Summary and discussion of the study

The purpose of this study was to find information about factors influencing purchase decision in an online jewelry store, and to study consumers' attitudes towards buying jewelry products online. The results of the study will help Precium Oy Ltd., to design its new online jewelry store and its services, as well as help in making a marketing plan.

The objectives were, in the order of importance, to *determine the factors influencing purchase decision of jewelry online, to find out attitudes about buying jewelry online, to find thresholds for online purchase decision of jewelry, to find out what kind of services are expected and needed from an online jewelry store.*

The research method chosen for this descriptive study was a quantitative internet survey, which used findings from literature review to structure the theoretical framework and the questionnaire. The literature review itself gave answers to some of the upper-level factors or elements influencing online purchase decision: *usability, interactivity, trust (reliability) and aesthetics.* However, more detailed questions were developed in order to obtain more concrete results which would help designing the website and products and services.

The focus of the factors influencing purchase decision was mainly on reliability factors, because it is one of the most important factors for an online store, and there are many ways to influence the feeling of reliability. The survey also focused on product features and attributes influencing purchase decision, in order to get more detailed information about what the consumers are expecting from the jewelry products within the web store. Services expected from an online jewelry store, attitudes towards online jewelry store, and factors seen as thresholds were also studied through various sets of questions and statements. It is important to notice that the threshold factors oftentimes are related with the reliability factors, and vice versa.

Basic demographic information of the respondents were also collected in order to understand the target population better, and to find differences between and within demographic groups. A set of questions asking the respondents' jewelry buying behaviour was also implemented in the study, which will also help Precium Oy Ltd., to understand the respondents's buying behavior.

6.2 Summary of the findings

Below are the most important findings of the survey divided into three topics: buying behavior, factors influencing purchase decision, and attitudes, reliability and thresholds.

6.2.1 Buying behavior

Based on the findings of the research, it can be said that the respondents spend money on jewelry on average 173,6 Euros annually. Women spend 191,5 Euros and men 145 Euros.

Half of the respondents shop online a few times per year and 33% monthly. Only 25% of the respondents have bought jewelry online at least once, but it seems that it is not very common to buy jewelry online.

Half of men have never bought jewelry for themselves, and rarely buy any jewelry for themselves. However, 37% of male respondents buy jewelry as a present a *few times per year,* which indicates that they buy jewelry as a present.

Almost half of women buy jewelry for themselves *a few times per year* and 18% *monthly.* On top of that, *34*% of women buy jewelry as a present *a few times per year.* Women tend to buy jewelry as an impulse purchase, more often than men.

Looking at the future purchase intentions, it can be said that women are more likely to buy jewelry for themselves from an online jewelry store, however the average score for women was 2,92 (1-5 scale). Male respondents gave a higher score for buying jewelry as a present rather than buying for themselves, from an online jewelry store in the future.

6.2.2 Factors influencing purchase decision of jewelry

According to the results, the *appearance of jewelry* is clearly the highest influencing factor on purchase decision; material and price are the next most important factors. Interestingly the designer, brand and "Finnishness" of the jewelry have the least influence on purchase decision of

jewelry. The scores of the last three factors were not of high statistical significance; therefore the results cannot be generalized for the population.

The appearance-factor seems to be the most important factor for purchase decision online. *Detailed product pictures and information about the jewelry* was rated the most influencing factor for purchase decision in an online jewelry store. An *extensive product assortment* was also rated of high influence on purchase decision; along with *information about 14 day return policy*, which was quite interesting finding from the respondents. The last two results however cannot be generalized as the results are not of high statistical significance.

Customer service is expected, among the respondents, as a crucial part of online store, however it does not influence the purchase decision as much as appearance for example. 3D-modeling of jewelry could have some affect on purchase decision.

6.2.3 Attitudes, reliability and thresholds

Reliability was perceived as the most important element for an online jewelry store, rather than among usability, interactivity and aesthetics. The respondents saw it as an important part of the shopping experience as well. Therefore it can be concluded that reliability is a cornerstone for an online jewelry store.

Overall, online shopping was perceived as something which gives ease of buying for the consumer, because of the facts that the store is open 24 hours per day, the products can be ordered directly home, and because there is a lot of information available online.

When asked what factors influence an online jewelry store's reliability, *familiar payment methods* received the second highest score, right after *information security*, which is nowadays quite standardized and reliable already.

The appearance of the online store affects highly on the reliability. *Third party recommendations* were also seen as a source of reliability.

All of the factors influencing reliability are important, due to the fact that, if they are not taken care of, they might become a threshold for the consumer. Therefore all of these findings are of good value and importance for the company.

6.3 Business implications and recommendations

B2C e-business and online shopping are growing rapidly due to the changes in the business environment, because of the wide availability of internet, and technological advancements in software development, which have enabled easy and secure online shopping. In order for Precium Oy Ltd. to take advantage of this quite new area of business, the study will give brief recommendations and insights for business implications, which are based on the results of the survey. The recommendations that should be taken into serious consideration while developing the web store and its products and services are:

1. **Choose women as the main target group**, as they wear and consume more jewelry products and spend more money on them annually. Do not forget men, as they oftentimes buy jewelry as a present and spend a noteworthy amount of money annually on jewelry as well. The difference of these two focus groups has to been taken into consideration not only in website design, but also in differentiated marketing campaigns for men and women. The focus of marketing for women could be creating awareness of the web site and the ease and security of use. The focus for men could be creating awareness of a new and easy way to buy jewelry presents.

2. An old saying "first impression lasts" is very true in online business as in everything else. **The second recommendation is to make the graphic design of the web store as attractive and inviting as possible**, through giving high quality product pictures the central role of the web store. However, the usability of the web store should always be simple and easy enough for every user. Also, if the consumer has any difficulties looking around and finding specific information about products and i.e. shopping around is not comfortable or any arising questions are not answered on the website, the consumer most likely does not feel comfortable enough to buy products. Professional looks and appearance of the website give the consumers an impression of reliability.

3. **Ensure the feeling of reliability**, putting effort on giving importance on displaying the *consumer friendly return policies* and the vast *variety of payment methods*. When consumers see familiar and safe payment methods, as well as clearly written and presented delivery procedures and policies, they will feel much more secure. Displaying pictures and information about the designers of the jewelry and people behind the

company will help achieving more reliable image. The company should also create social buzz and word of mouth marketing, which has quite a high influence on reliability. When consumers get recommendations from third parties, whom they know to be reliable, it has a huge positive influence on purchase decision.

4. **Provide services which help the buyer to "virtually" try on products, choose the correct size and see the products from multiple perspectives,** in order to give the consumer more concrete feel of shopping. One of the biggest threats for Precium Oy Ltd. is that most of people do not buy jewelry online. The cause of the problem might be the fact that one cannot touch or try on the products in an online store. Besides high quality pictures, the recommended services could be: *3D-modeling of products* in which the consumer can move and see the products from multiple angles and sizes, *concrete fitting tips* for choosing correct size as well as what kind of clothes the products could match with, and *provide online and mobile customer service* where the consumers can talk directly with the staff of the company. Giving the consumers the possibility to leave questions on the website could be another option, as all of the consumers might not want to talk directly to the personnel of the company.

Aforementioned recommendations have direct business implications for Precium Oy Ltd. The company has to choose which of the recommendations it can use and implement within its resources. Further research on factors concerning usability, interactivity, reliability and aesthetics or even marketing mix could be conducted in order to get more detailed information about consumers needs and interests.

6.4 Conclusion and lessons learned

The objective of this study was to find information about factors influencing purchase decision in an online jewelry store, as well as attitudes towards an online jewelry store, in order to help Precium Oy Ltd. to develop its web store before opening it for the public. Multiple factors influencing online purchase decision were found from literature review in Chapter 2. Some of the factors were partly adapted for the study. The study was conducted through a quantitative online questionnaire sent to the Finnish Facebook-connections of the owners of Precium Oy Ltd. Some of the results reflect mostly the views of this target group, and some of the interesting findings can

be generalized for the bigger population, depending on the p-value of the results, which were given in the tables in Chapter 4.

The researcher learned a lot during the research process, and has a wider view of the numerous elements which have to be taken into consideration while doing a research. Should the researcher do the same research again, it would be much easier to focus on the actual objectives of the research, which were to find the correct answers to the research questions. Oftentimes the researcher had to ask himself "why am I asking this, or writing this literature review?", and finally the structure had to be changed in some ways in order to keep a clear focus on the research. To conclude, the researcher learnt that one cannot study everything at once, but actually a study should be quite simple and focused on one or two specific issues.
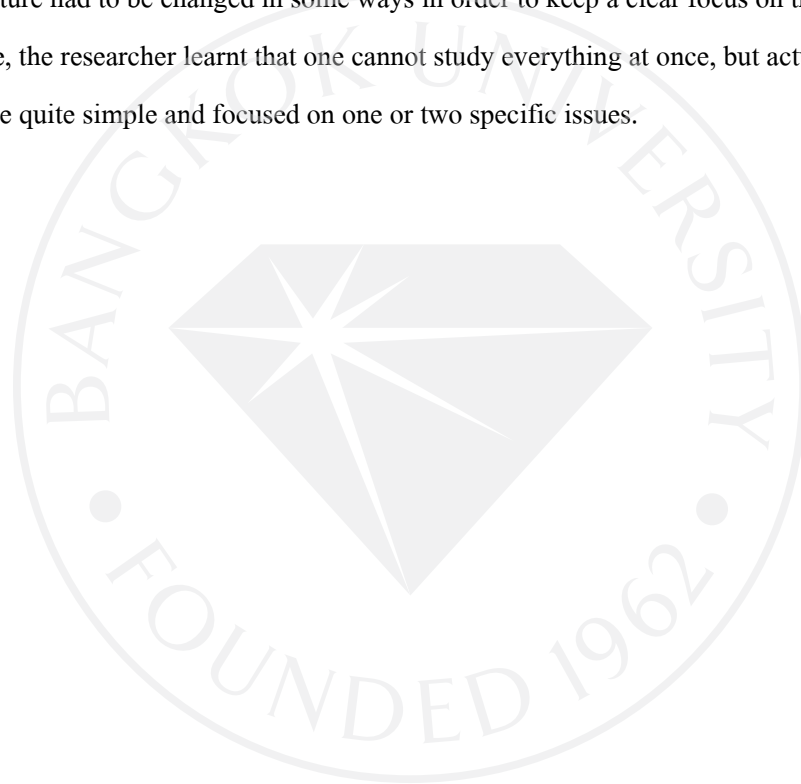
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Appendix A

APPENDICES

Study about jewelry and online stores

This study deals with your jewelry and online store buying behavior. The study is both for women and men. Please kindly answer to every question. There are three parts in the questionnaire. Filling the questionnaire takes approximately 5 minutes. All of the responses are of great help to the researcher.

PART I

Attention: the researcher cannot identify or trace back who has responded.

1. Gender?

- Male
- Female

2. Year of birth?

Write for example: 1980

3. What is your occupation?

- Official
- Employee
- Managerial level
- Student
- Retired
- Unemployed
- Entrepreneur
- Other_____

4. Your monthly salary?

Appendix A

- Under 2000 Euros

- 2000-4000 Euros

- Over 4000 Euros

- Can't say

5. What is the level of your education?

- Primary school degree

- High school or equal degree

- University, polytechinc or other academic degree

- Other_____

PART II

6. Buying behavior. Answer the questions below on the given scale.

Never, not so often, a few times per year, monthly, at least weakly

    A. How often do you shop online on an average?

    B. How often do you buy jewelry online on an average?

    C. How often do you buy jewelry for yourself on an average? (not only online, but overall)

    D. How often do you buy jewelry as a present? (not only online, but overall)

7. How do the following factors influence on your purchase decision when buying jewelry for yourself?

Answer on the scale 1 = Very low influence 5 = Very high influence

    A. Brand of the jewelry

    B. Price of the jewelry

    C. Appearance of the jewelry

    D. "Finnishness" of the jewelry

    E. Designer of the jewelry

    F. Material of the jewelry

Appendix A

8. Answer the statements below on the given scale.

Strongly disagree, disagree, neither agree nor disagree, agree, strongly agree.

    A. In the future, I will buy jewelry for myself from an online store.

    B. In the future, I will buy jewelry as a gift from an online store.

    C. Finnish online stores are reliable.

    D. Customer service is an important element of an online store.

    E. Reliability of an online store is a crucial part of the shopping experience.

    F. The products purchased from an online store must be cheaper than from the brick and mortar store.

    G. I buy jewelry mostly as impulse purchase.

    H. I know the size of my ring wihtout fitting/trying on.

    I. I value design-jewelry higher than other jewelry

    J. I buy my jewelry mostly by myself

9. If you would buy from an online jewelry store, how important would you perceive the following factors.

Answer on the scale 1 = Completely unimportant 5 = Very important

    A. Use convenience of the online store

    B. Interactivity of the online store (interaction between personnel and other customers)

    C. Reliability of the online store

    D. Appearance of the online store (webpage design, looks and atmosphere, quality of pictures)

PART III

This is the last part of the questionnaire.

10. How do the following factors influence on the reliability of an online jewelry store?

Answer on the scale 1 = Not at all 5 = Very much

    A. Pictures and information about the people behind the company

    B. Familiar payment methods

    C. Information security of the online store

    D. Third party recommendations (friends and acquaintances, blogs, forums)

    E. Brand of the online store

    F. Appearance of the online store

11. How much would the following factors influence on your purchase decision in an online jewelry store?

Answer on the scale 1 = Not at all 5 = Very much

    A. Detailed product pictures and information about the jewelry

    B. Pictures of people wearing the jewelry

    C. Videos of people wearing the jewelry

    D. Possibility to discuss with the customer servce

    E. Information about 14 days return policy

    F. Extensive product assortment

    G. Fitting tips on the webpage

    H. 3D-modeling (movable) of the jewelry

12. How do you perceive the following characteristics of an online jewelry store, compared to a brick and mortar store?

Rate the benefits of online stores listed below on the scale 1 = Completely unimportant 5 = Very important

    A. The store is open 24 hours

    B. Ease of buying

    C. Information availability from the online jewelry store and from the internet

    D. Product can be ordered for home delivery

13. How much do you spend on average on jewelry in one year?

Estimate the amount spent in Euros and write it in the text box below. For example: 200.

Appendix B

Coding structure of the research

PART I Demographic data

VARIABLES	CODING
1. Gender	1 = Male 2 = Female
2. Age	1 = Under 20 years 2 = 20-29 years 3 = 30-39 years 4 = Over 39 years
3. Occupation	1 = Official 2 = Employee 3 = Managerial level 4 = Student 5 = Unemployed 6 = Entrepreneur 7 = Other
4. Monthly salary	1 = Under 2000 Euros 2 = 2000-4000 Euros 3 = Over 4000 Euros 4 = Can't say
5. Education	1 = Primary school degree 2 = High school or equal degree 3 = University, polytecnhic or other academic degree 4 = Other
13. Annual exspenditure on jewelry	1 = 0 Euros 2 = 1-100 Euros 3 = 101-249 Euros 4 = Over 250 Euros

Appendix B

PART II Data

VARIABLES	CODING
6. Jewelry buying frequency	1 = Never 2 = Not so often 3 = A few times per year 4 = Monthly 5 = At least weakly
7. Factors influencing jewelry purchase decision for yourself	1 = Very low influence 2 = 3 = 4 = 5 = Very high influence
8. Statements	1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree
9. Importance of factors for online jewelry store	1 = Completely unimportant 2 = 3 = 4 = 5 = Very important

Appendix B

PART III Data

VARIABLES	CODING
10. Factors influencing reliability of online jewelry store	1 = Not at all 2 = 3 = 4 = 5 = Very much
11. Factors influencing jewelry purchase decision online	1 = Very low influence 2 = 3 = 4 = 5 = Very high influence
12. Charasteristics of online jewelry store compared to brick and mortar store	1 = Completely unimportant 2 = 3 = 4 = 5 = Very important