

Master thesis
Customer satisfaction within e-commerce on the beauty market
(Danish Consumers)

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Abstract

Dette kandidatspeciale har til formål at undersøge hvilke faktorer der gør sig gældende når en forbruger gør brug af e – handel i relation til køb af skønhedsprodukter. Ydermere har det til formål at undersøge hvilke faktorer der er gør sig gældende i forhold til hvor tilfreds kunder er når de køber skønhedsprodukter online og hvordan deres loyalitet til en given virksomhed formes på baggrund af dette.

Metoden hvorpå den overordnede problemstilling er undersøgt er ved en udarbejdelse af 5 hypoteser der er dannet på baggrund af læst teori omhandlende e – handel, forbrugertilfredshed og loyalitet.

Disse er hypoteser er blevet bekræftet eller afkræftet ved hjælp af data, som kommer fra et spørgeskema, der er udarbejdet på baggrund af den same teori som er brugt til hypoteserne.

Resultaterne vise en sammenhæng mellem hvor påvirket en forbruger er af sociale media og hvor stort deres forbrug af skønhedsprodukter er.

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Chapter 1 - Introduction

1.1 Introduction

Over the last years, the digital world has become a huge part of people's life. The importance of the web has grown rapidly, and the digital consumer has a lot more importance than ever before.

Using the web has become a common factor in the average person's everyday life, and there are a lot of reasons for that.

People have a tendency and urge to be a part of something, and engaging in this 'new' universe with different platforms involved.¹

According to a Euromonitor article from 2017 about the digital consumer and digital opportunities, some of the most common purposes for engaging in the digital world is getting entertained, education, social activities and shopping.

In this thesis we are going to look at how the Danish consumers engage in online shopping when purchasing beauty products.

As we are going to look at in our thesis, the importance of e-retailing has grown a lot through out the years. Almost every person has come across the opportunity of shopping online, and most of these people have tried shopping online themselves.

In Denmark, lots of research show how big the e-commerce platform have become, and most importantly how consumers use the web platform as a shopping place.

We are in this thesis going to look at the purchases made online regarding the beauty industry, and then analysing the whole process for the consumer when shopping online.

The beauty industry itself, has played a huge role on an international level, and the current situation shows that it is only getting bigger and bigger.

Many beauty products are sold in physical shops as well as online, but because social media plays a huge role, especially when looking at the beauty industry, the impact from influencers on these

¹ See appendix 1 – Euromonitor article (2017)

social media platforms and the way they recommend and review products or brands, have a huge impact on the buyers in persuading them into buying beauty products.

Lots of people further use the online way of shopping because the products are usually easier to find and sometimes the consumer already know what they want, which makes online shopping a lot more convenient.

1.2 Thesis structure

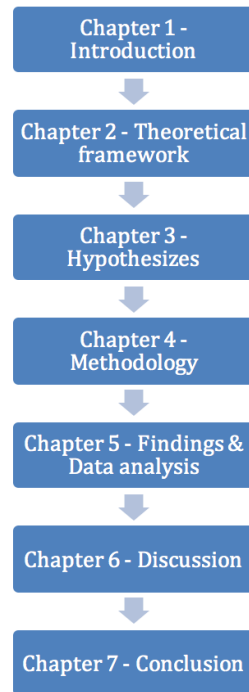


Figure 1

The thesis is going to be divided into seven different chapters (see figure 1).

Chapter One being the introduction where the overall concepts and definitions of the thesis are being told.

Chapter Two is the theoretical framework and the chapter where all the relevant literature regarding the field of social media, customer satisfaction, CRM and loyalty is.

Chapter Three is the chapter where we are going to build the hypothesizes based on the literature and the literature from chapter two

Chapter Four is the methodology which gives an overview of our approach and how we have gathered the data needed to answer our main problem statement.

Chapter Five is the findings and data analysis, where we are going to analyse the data and explore the links between the variables.

Chapter Six is the discussion where we discuss everything found in the data analysis and how it is related to the literature. We are furthermore going to discuss our approach throughout the thesis and critique the methods used and the data gathered.

Chapter Seven is the conclusion where everything is summed up.

Hypothesizes analysis

1.3 Problem statement

The field within customer satisfaction can be discussed in many ways, depending on the specific situation one is looking at and willing to analyse. The issues regarding this field are more relevant than ever, because the aspect of online business is becoming very personalized.

A satisfied customer is not just a description about how a customer feels, but also a way of how the customer is going to act and help bring the company moving forward or backwards.

There are a lot of research made on the topic of customer satisfaction, but what makes this thesis different, is the perspective of looking at what makes a satisfied customer when purchasing beauty products online.

Our aim in this thesis is to analyse the customer satisfaction on the Danish market regarding beauty products.

We have tried to create a realistic picture of the Danish consumers when purchasing beauty products online, our aim has been to give the most realistic picture of how different factors and situations can influence the consumer.

We have used relevant theories to answer our questions regarding the online behaviour and satisfaction on the Danish market, and we have gathered data from a survey to answer our hypothesis through mathematical models.

Research question

Based on our online shopping customer survey, the aim of the thesis is to answer the following research question:

What are the main factors influencing a consumer when shopping online, and what factors are important for a customer in order to be satisfied and increasing the loyalty towards a brand.

1.4 Limitations

As the aim of the thesis is to analyse the Danish consumers when shopping online, the first limitation is the focus on only the B-2-C market. The field of online shopping is very big and not realistic to analyse through a single thesis, therefore we are only going to look at the consumers who buy beauty products. The second limitation is based on gender, which means only females are going to be presented in this thesis, and the third limitation we have is, that we demographically only are going to look at the Danish beauty market.

1.5 E-commerce, E-business and E-retailing

1.5.1 E-commerce

The basic definition of e-commerce is the concept of buying, selling and exchanging products, service and information through computer networks including the Internet (Efreim Turban, mfl. Electronic commerce p. 4)

The simple way of explaining e-commerce is as a reference to buying and selling through the internet. Most people think this as the classic consumer-retailer relationship, but a realistic way of thinking about e-commerce is that it is not only the financial transaction which is important, but also the communication, for example from the customers asking for more information. There are different perspectives for e-commerce. Some of them are listed here by Kalakota and Whinston (1997):

- **Communications perspective:** Information, products, services or payments delivered by electronic means
- **Business process perspective:** The use of technology for business related transactions and workflows
- **Service perspective:** Making the cost as low as possible and at the same time making an increase in the speed and the quality of a service delivery
- **Online perspective:** The concept of buying and selling products and information online.

In many cases the term *commerce* is defined as transactions between businesses and the idea behind electronic commerce is therefore not so appealing for people who use the field of EC as a business platform. Instead, the term e-business is used, because it has a broader definition of a

company using the platform not only to sell and buy, but also handling customers and collaborations with other business partners (Efreim Turban Electronic commerce p. 5).

1.5.2 E-business

IBM defined e-business in 1997 as *“The transformation of key business processes through the use of internet technologies”*

The important thing to understand about e-business is, the integration of business processes and activities according to an online platform, expressed through information and communication technologies. This is defined by DTI (2000).

When a company develops digital strategies, there are four steps the company needs to go through which goes from having a website into becoming a fully integrated e-business platform.

- **Step 1** – Gather information through the internet
- **Step 2** (e-marketing) – Using the internet for e-marketing as a tool for the company
- **Step 3** (e-commerce)– Using the Internet for supplier purchase and making the payment transactions electronically.
- **Step 4** (e-business) – The company has conducted digital transformation of value chain activities and processes. Moreover, the company is also connected online with suppliers, customers, dealers and partners in the supply chain.

The aim of showing these four steps is to give a brief overview of the way e-business works, and how a company needs to consider different aspects when developing a full e-business platform.

1.5.3 B2C – Business to Consumer

In this thesis we are focusing on the consumer market. When looking at the consumer market we look at the term Business-to-consumer or B2C. The term B2C is defined as *“Commercial transactions between an organization and consumer”*²

² Chaffey 2011 p. 27

When analysing the customer data in our thesis, we specifically look at the preferences and behaviour regarding their use of websites to purchase beauty products.

1.6 E-retailing

1.6.1 What is E-retailing and the current situation in Denmark?

The basic definition of e-retailing is all the sales made by consumers through internet or other electronic channels (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017)

It relates to the classic definition of B2C market, where all the transactions are done on an electronic platform.

Websites that promote free information about a brand for instance also fits in the same category because it involves the consumer, but it does not have a direct transaction.

E-retailing has been growing a lot through the last year especially in the Western-Europe and America (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017), and is expected to grow further because of the awareness and ease about purchasing product on the internet. There are still countries that do not contribute to the growth of e-retail because they prefer physical shopping more than online shopping.

According to table 1.1³ Denmark is at a 90% Internet penetration level, which shows that e-retailing in Denmark is a popular way of purchasing products.

People are spending a lot of money on the Internet more than ever, and because of that the possibilities of having a growth on the Danish market are big and at a high rate.

People are more aware about the opportunities they have when shopping online, and according to our survey it is very noticeable that e-shopping is a preferred way of shopping.

³ See appendix 2

The biggest challenge for every online retailer is to catch the audience and every potential customer through excellent service and a high level online experience. (Pantono, Nguyen, Dennis, Merrilees, Gerlach 2017)

The goal is also to make e-retailing a common thing among the consumers, so the sales in e-commerce become constant, instead of having growth from first-time-online-shoppers.

The share of online retailing based on the total sales in Europe grew from 6,3% to 7,2% (Pantono, Nguyen, Dennis, Merrilees, Gerlach 2017)

The overall growth in Europe in e-retail has been growing ⁴

1.6.2 Disadvantages of e-retailing

The easy and convenience of online shopping and having an online platform to use is very preferable for consumers. The advantages of e-shopping are many, but like most other things is can face some downsides as well.

According to the book (internet retailing and future perspectives) it talks about how bigger luxury companies face cost problem, hence they need to live up to their given standard. For smaller companies the start up is not expensive, but when bigger brands like Chanel, Hermes and Dior (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017) try to convert their business into an online platform, they have to live up to the standard set by the brands and especially live up to the customer experience that is required for such big brands.

On the other hand, there is also the cost of shipping which especially affects the smaller companies, hence potential consumers can view this as a big disadvantage for the company.

That is also one of the biggest differences between bigger and smaller retailing companies. The bigger companies often offer free shipping compared to smaller companies who cannot afford to offer similar acts.

Fraud and security is also a very important factor when talking about e-retailing. It is essential for the online retailers to invest in strong security software, because there is a strong need to protect the data given by the customer. It can break the trust of the potential customer if the site seems suspicious and not trustworthy.

⁴ See appendix 3

Although the online way of shopping seems easy for many, the power of a face-to-face communication will get the biggest advantage (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017). If a customer/potential customer is introduced to something new or is interested in buying a product, it is often easier for him/her to reject or doubt the item on an online platform compared to having a psychical person advising and convincing the customer to buy the product. Consumers often have a perception of products being cheaper when shopping online. This is not always the case, and instead it puts a pressure on e-retailers, and many times the consumer just stick to the physical shop because the prices are often consistent and they know what to expect.n(Pantono, Nguyen, Dennis, Merrilees, Gerlach2017)

1.6.3 Advantages of E-retailing

There are a lot of things to consider when having a physical store. One of the things that can matter a lot for consumers is the location. This issue is not something an online retailer should think of, instead it opens up opportunities for both the consumer and retailer hence the products and services are available everywhere as long as they have an access to the internet and it being available 24/7.

Another advantage linked to e-retailing is the cost. It is cheaper to have a site and sell products online, compared to having a physical store. There are of course cost attached when talking about delivery and packaging but overall it is seen as a cheaper way of selling. The regulations for an e-retailer is also smaller compared to a physical store where you have to take a lot of other factors in to consideration.

1.7 The E-retail mix – Seven C's

The seven C's are techniques and tools used by a company to provide value for customers. The well-known 4p's in marketing (which became the 7 P's later on), is the base of the 7C's. More specifically it is a development of the previous model. The 4P model was created by E Jerome McCarthy's (1960)⁵ to make customers more satisfied and adding value to their purchase. Of course there are some similarities when comparing the models, but the focus of the 7C's is on e-

⁵ (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 8)

retailing and also having the customer perspective throughout the whole model. The C stands for communication. The E-retail mix is described based on the book “Internet retailing and future perspectives”

The 7C's in E-retailing

- **Convenience for the customer**
- **Customer value and benefits**
- **Cost to the customer**
- **Communication and customer relationships**
- **Computing and category management issues**
- **Customer franchise**
- **Customer care and service**

Convenience for the customer

In the original model⁶, the first factor is “Place”. The importance of ‘place’ is a company’s choice of putting their shop in a place that is convenient for the customer.

In the 7C model, the first aspect is called ‘convenience for the customer’ because of the considerations the company has made before opening an e-shop. It can be everything from delivery options to the facility of having easy access to their physical shop (if any).

The main point is to fully fill the need of the customer in every way. The more accurate you are with the options for the customer, the better the company is positioned.

The physical location of the e-shop also matters a lot when looking at the cost attached to a customer when having to purchase a product. Many times the delivery is cheaper when the e-shop is in the same place as the customer.

The virtual location has to work properly and in tact with all other things linked to the website.

Customer value and benefits

⁶ 4P model

The next factor is Product, but in the 7C's it is referred to as customer value and benefits. It is not only about the product that the company is trying to sell, but also many other factors, which are equally important for a customer.

The key element here is service, which leads to satisfaction for the customer. It is important to provide an excellent service on every market today, because the customer is mostly interested in getting more than they expect, which many times is a way of showing great service and something the customer feels valued for.

It is in many cases about personalizing every step and product, so the customer is in charge instead of the retailer itself. It is about creating a new service.

Cost to the customer

'Price' in the original 4P model, is a way of defining how the price of the product should be and how convenient it is for the customers. However, it is in this case seen from a customer's point of view, the cost related issued when dealing with purchases online. It is not only the cost of the product, but also the shipment and taxes that are linked to the purchase. Another aspect is the internet access that also require money. Even though a lot of these costs are explicit, it is still counted as a part of the total cost attached to the purchase.

There is a perception among customers, about products being cheaper when buying online, which is interesting for the e-retailer. This means that the company has to match a certain standard, for example there are some companies who exclusively have offers for their online customers only. This can also be a bad thing for the retailer, as some customers may search around on the internet to find a certain product, and when the price does not match in the physical store the customer tends not to become satisfied.

Some companies offer price matching their products, in order to get the sale.

Communication and customer relationships

The next step in the 4P model is Promotion. This is the step where the e-retailer suggests the customer to buy the product through promotion. If you compare it to the method of communication from the 7C model, it is different because communication involves a two-way

process, where the customer typically gives feedback and hereafter the company is able to improve based on that information.

The important part is the different tools that are used to communicate better with the customer. E-mail and direct marketing is an often used tool to interact better with the customer, by sending e-mails directly after a purchase, which makes the customer feel more involved.

Social media is playing a very important role in the retailing business which we will also discuss later in this chapter. Retailers usually show a very strong connection between the customer and retailer through different platforms like Instagram and Facebook and by that creating a stronger communication.

Another aspect of the 'customer value and benefits' satisfaction point is that people are more likely to get triggered by atmosphere, surrounding and face to face communication and thereby they are more satisfied when purchasing a product in a physical shop. The challenge for the e-retailer is to create a comfortable environment to make the experience for the customer better. Customer relationship is a term used to create a relationship between the retailer and the customer through communication and emotionally involving them. The purpose of this is to make the emotional value higher for a product (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 12) On this part this is seen as a disadvantage for an e-retailer because they are not able to provide the communication on the same level.

On the other hand, e-retailers have the advantage of gathering data and use it to provide custom made recommendations so the customer gets inspired and the process becomes more personal and customized.

Computing and category management issues

One of the important factors when dealing with a website, is the management issues where the company needs to optimize their system in the most efficient way. Inventory and stock level issues is a common problem that companies face when not knowing the exact demand and the requirements. It is important to manage it in a way to lower cost, and still satisfy the demand and need of the customer. In this case some companies implement it-systems that analyse and interpret the demand patterns such as the British retailer Tesco (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 14).

Other companies have also used their platforms to optimize the strategies and to achieve better communication with the customers.

The key of this aspect is to use the platforms to provide and categorize the different issues that the e-retailer is facing.

Customer franchise

Trust and security are main factors for customers when buying online. Building trust for customers is a very crucial part for the retailer. Many e-retailers invest in quality, customer care and service, in order to maintain the assessment of customers (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 16) Customer franchise is a mix of image, trust and branding, and the aim for the company is to build strong relations by investing in quality communication and customer care and service (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 16)

For the retailer to meet the needs of the customer, the retailer has to work very hard on building up the trust and also to implement systems where the customer feels secure.

Customer care and service

One of the most important factors for both consumers and e-retailers is the way the e-retailer treats and connects with the consumer. The classic way of describing retailing is categorising it as a service industry (Pantono, Nguyen, Dennis, Merrilees, Gerlach2017 p. 16)

There are different ways of contributing to a high level of service, many retailers provide competitive prices and thereby contribute positively to the customer satisfaction. In e-retailing it is done a little differently, here the e-retailer provides different types of services especially through communication like online chat, social media integration, telephone help line etc.

This is one of the most crucial parts for e-retailers, as a lot of the websites lack to provide the required service. On the other hand, the e-retailer can make the e-retailing experience a lot more helpful and convenient by implementing these tools and facilities to better their situation.

Chapter 2 – Theoretical framework

2.1 Theoretical framework

Within this chapter different theories regarding customer satisfaction will be explored. We will further take a look at different theories concerning the internet, social media and customer relationship management, Service Quality, Customer satisfaction theory and loyalty.

2.2 Web 2.0

Web 2.0 is the definition of a wide array of interactive tools and social communications techniques used on websites. By being that, it helps the users with interaction and it further increases user participation, so with other words, its is a name used for websites which has the common denominator, that the website is often just a platform, but the content is created by users.

Examples of that are: Blogs, podcasts and social networks. (Chaffey p. 24).

“Encouraging creation of user-generated content – blogs are the best example of this. Another example is the collaborative encyclopedia Wikipedia”(p. 24 Chaffey).

The birth of the web 2.0 concept was in 2004 after a brainstorming session which was hosted by O’Reilly Media Inc. ⁷ (Alexis Barlow, Margaret McCann and Anne Smith).

So the concept of Web 2.0 allows the users to share information, thoughts and experiences on a common platform, which means that the user has several ways of interacting with other users and companies.

When looking at this from a business perspective, then companies have a fair chance of collaborating and communicating with their customers and getting the feedback they need. ⁸ (Alexis Barlow, Margaret McCann and Anne Smith).

⁷ <https://www-igi-global-com.esc-web.lib.cbs.dk:8443/gateway/chapter/full-text-pdf/54166>

⁸ <https://www-igi-global-com.esc-web.lib.cbs.dk:8443/gateway/chapter/full-text-pdf/54166>

2.3 Social Media

Social media is a platform which is of big importance to the retail industry, since it is possible for the companies within the retail industry to engage with their customers through these social media websites.

In today's era, "everyone" has the power to express themselves through some kind of online platform in one way or the other.

This makes the consumer's position even more powerful, firstly because, they are able to connect with other consumers on a global level, and express their opinions on different products, service and so on. They are able to make reviews online, both good or bad and openly without the interference of the company itself.

The *brand-consumer* relationship has changed its focus from the brand to the consumer. This has changed in such a way, that the company is more focused on learning about their consumers, instead of just putting out information on specific brands.

So the company has switched its focus towards understanding the consumer, and thereby building trust, which will be beneficial for the company.

Therefore, the research shows, that social media plays a big part in helping with that.⁹ (Neil Woodcock, Andrew Green and Michael Starkey).

2.4 Social media marketing

Social media marketing is a term which is used to describe companies use of social media in their marketing mix. So it is a communication tool for companies to use. The purpose of social media marketing is engagement with the consumers, and it is typically a part of a company's communication strategy.

⁹ <https://link-springer-com.esc-web.lib.cbs.dk:8443/content/pdf/10.1057/dbm.2011.7.pdf>

2.5 Customer relationship management

(Customer relationship management is a term used to describe a company's use of the database)

The field of customer relationship management is a very important part of a company's strategy and is important in the world we live in today. A satisfied customer is not only important in terms of profitability for a company, but also when looking in the long run, if the customer becomes more loyal towards a specific company, it reduces the cost of a customer over time (Chaffey p. 451)

This is the reason why a company gathers data about the history of their customers and converts it into something usable to better the situation.

This approach is a specific framework that every company is struggling with, because the need and expectation of the customer is not easy to determine. With that said, there are still some patterns that the retailer can look at in order to improve everything.

Customer relationship management describes the approach used to build up a relationship with a customer and keeping it. The essence of this approach is to build up a strong relationship with the consumer, resulting in profitability for the company. (Managing the Customer relationship: A framework for E – CRM Analysis).¹⁰

2.6 E-CRM

To develop a customer relationship there are some key elements that need to be fulfilled. With the help of databases and techniques such as e-mail communication, the web becomes more competitive in terms of tailoring personalized services and improving a company's strategy.

The online approach is also known as e-CRM.

Chaffey and Smith (2008) talk about the two terms CRM and e-CRM and address that both are linked together. One needs to understand the term CRM, in order to analyse e-CRM.

Even though there are specific ways of implementing e-CRM, which the staff can be ordered to fulfil, the key lies in understanding the concept in both scenarios, those are the facts that the terms

¹⁰ <https://www-igi-global-com.esc-web.lib.cbs.dk:8443/gateway/chapter/full-text-pdf/10046>

evolve a deep insight in customer culture and not just a procedure using databases and technologies. (chaffey s. 455)

SCRM is another term used to connect social media with customers to engage building up brand loyalty and trust to its customers (Social CRM as a business strategy).¹¹

2.7 Service Quality

Service quality is important in order to understand a consumer when looking at their needs and tendencies.

Service quality lies in the field of consumer behaviour, as the service is crucial for the process of buying and remembering the product or service.

The consumer remembers something through experiences, and it makes an impact in the mind of the consumer, which in the end can be beneficial for the retailer. (Consumer behaviour s. 62)

The incidental learning, which is referred to as an unintentional learning by remembering different things in the brain, is very important as it stimulates the brain and can contribute to the buying process for the consumer.

Different research has been made to understand, that these basic principles about triggering and stimulating the brain is an important step to not only understand the consumer, but also have it transformed and implemented in order to make it beneficial for the retailer as well. (consumer behaviour p. 62)

2.7.1 What is quality?

In order to make the customer satisfied, the quality of the company needs to reach some specific standards.

A consumer can have different expectations towards a brand, product, service or the company in general, but if the expectation doesn't meet the actual outcome, the customer is more likely to be dissatisfied (operations management p. 414) Meeting these standards and reach the expectation level of the consumer, can be challenging for every retailer. The quality aspect is not always easy

¹¹ <https://link-springer-com.esc-web.lib.cbs.dk:8443/content/pdf/10.1057/dbm.2011.7.pdf>

to manage, because of the different expectation levels potential customers have, and in order to make the situation optimal for the retailer, the retailer has to meet these levels of expectations.

Quality is a difficult term to explain and define. Not everyone has the same perception of what quality is, and when asking people, the outcome can be different depending on who you ask.

The important thing to understand when looking at quality is the expectation the consumer has towards something, and when talking about service quality, more specifically, the approach is very subjective. It is an overall evaluation of the situation, and the better you feel treated the more likely you are to remember it as something good (Operations management s. 415)

2.8 Customer satisfaction theory

Customer satisfaction is an important factor when a company wishes to retain their customers. It is therefore important to keep the customer satisfied in order for them to keep buying their products from the company. If the company doesn't do its best to retain their customers, they might lose market shares and profit.

2.8.1 How is customer satisfaction defined and why is customer satisfaction so important?

Customer satisfaction within this thesis is firstly defined by the **Service Quality Gap model**.¹² We will then further look at the importance of **Loyalty**¹³ in terms of the different kinds of loyalty that exist.

The importance of customer satisfaction lies in the fact, that it is important for a company to have customers in order for the company to be able to make profit. It is at the same time much costlier to acquire new customers than it is to retain existing customers.

¹² Nigel Hill, Jim Alexander – Handbook of Customer satisfaction and loyalty measurement p. 6

¹³ Nigel Hill, Jim Alexander – Handbook of Customer satisfaction and loyalty measurement p. 14

Losing customers is known as customer decay and can be explained by the following model:

2.8.2 The Service Quality Gap model

The service quality gap model categorizes in, 5 different ways, the gaps a customer can have when their perception of a purchase situation doesn't match with their reality. In other words, the lack of satisfaction they can experience when they are being a consumer of a given product.

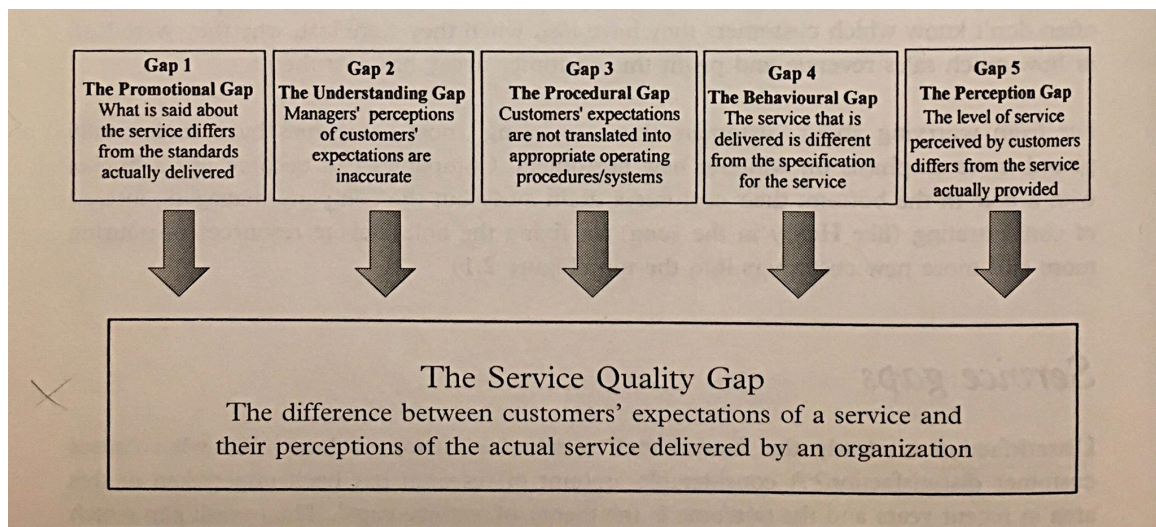


Figure 2¹⁴

The Promotional Gap, here we find a gap between what the customer expects based on the marketing the company has provided. The company's eagerness to sell their products and therefore their marketing communication creates an expectation which is hard for them to fulfill. That's where the gap in expectations between customer and the products provided by the firm meets.

The Understanding Gap, here we have a lack of understanding for what is important for customers. If the managers of the given company don't have a good understanding of what's important to the customer, it is very hard for them to create a product or provide a service which is satisfying to the customer.

¹⁴ Nigel Hill, Jim Alexander – Handbook of Customer satisfaction and loyalty measurement p. 6

The Procedural Gap, in this specific gap, the company or the organization is full aware of what expectations the customer has, and what matters most to them. The gap on the other hand here is, that the company despite having an understanding of what the customer values the most still fail to implement the right procedure that will satisfy the customer.

The Behavioral Gap, is gap that happen when employees within an organization fail to live up to the operational procedure which is provided by the company. In situations where companies know exactly what the customer wants, and what procedure are necessary for them to be happy and satisfied it is in this gap, that the operational procedure isn't fulfilled by the people working for the organization, and that it where the lack is created.

The Perception Gap is about how the company is perceived by the customer. Even though you do not lack any quality within your company, your customers might still not be totally satisfied. This is the gap between what customers perceive as reality and what the true reality is. Even though the perceptions don't match with what the true reality is, it is still very important how customers perceive the company, because that is "their" reality of the performance of the company, and that is the reality they are going to base their purchase decisions on.

2.9 The concept of loyalty in customer satisfaction

Monopoly loyalty is viewed as the loyalty when customers do not have any choice than to stay loyal to a company, since there are no other options available. That can not be categorized as true loyalty since the customer often times get a bit resentful due to the fact that there are no other options available.

Cost of change loyalty this kind of loyalty is as well far from devoted, since the customer often times live with lower levels of satisfaction, but the hassle or cost of changing a supplier is often times greater than staying, and that's why in these cases the customer stays with their current supplier.

Incentivized loyalty this form of loyalty has to do with companies offering loyalty cards to their customers. With loyalty cards, customers are often times able to collect points in order to get some discount or buy products with their points. This form of loyalty is likewise not so strong, since many customers might sign up for a loyalty card for the sake of it, and collect some points. They might, and in most cases, have a few loyalty cards, which means that they are not specifically loyal to one company.

Habitual loyalty this loyalty is defined on the basis of convenience. If a supermarket is on the way home for a customer, then it is convenient for the customer to stop by and do their grocery shopping there. That is as well not full on loyalty, because if we assume, that another grocery opens, and is on an even more convenient location, the customer might switch their grocery store for the more convenient one. So the sense of security a company might feel is rather misleading, since the true “loyalty” was never there.

Committed loyalty, is the sincerest kind of loyalty. This degree of loyalty can be explained in the same way as being loyal to one football team. No matter what happens with the team the supporter is still going to be loyal to the team (Nigel Hill, Jim Alexander – Handbook of Customer satisfaction and loyalty measurement p. 14).

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Committed customers:

Having committed customers have some perks. When customers are truly committed to a company, they are more likely to stay with the company for a longer period of time. Further, customers are more committed the more satisfied they are. (Handbook of Customer satisfaction and loyalty).

Having committed customers have some perks. When customers are truly committed to a company, they are more likely to stay with the company for a longer period of time. Further, customers are more committed the more satisfied they are.

Customer loyalty is a term used for customers who stick to a specific company or brand, and thereby they contribute to the company's profitability (E – commerce managerial perspective p.85).

A loyal customer will keep coming back and by doing that they increase the profit of the company due to the customer's buying patterns.

The cost of a new customer is five to eight times higher than that of keeping an already existing customer. When keeping an already existing customer the company does also position themselves much better, since the chances of a customer preferring other brands is fairly small (E-commerce managerial perspective p.85).

The assumption that a customer would switch to another brand due to price differences will also be fairly small, because a loyal customer over see or ignore these small differences.

Another benefit of having loyal customers is that they can recommend specific a specific brand, product or brand to another potential customer. This further increases awareness of the company and thereby increases sales and profits (E – commerce managerial perspective p.85).

2.9.1 Loyalty vs E – loyalty

Ellen Reid Smith talks about E – loyalty as being the same thing as loyalty. Even though you put an “e” in front of the concept, the concept stays the same.

The rise of the Web and e-business made it easy for customers to gather and compare information and prices, which at the same time made them more complex and harder for them to stick to just one brand.

As stated by Ellen Reid Smith, the fact that makes the web so useful in many ways is the same thing that makes it even harder for company's to having loyal customers (E – loyalty 2000 p. 16).

Main drivers for customer's e – loyalty

When looking at the main drivers for e – loyalty, the thing the company needs to to is to specify their targeted segment. It is important to understand the drivers that are related to each segment, which means that the drivers for loyalty might vary from segment to segment.

In order to understand that, different qualitative research methods can be used. By asking several questions, such as buying patterns when the consumer is making a purchase, preference according to websites, and what the customer in general prefers and feel about the company. These are the factors that leads the company towards the main drivers when it comes to e – loyalty (E – loyalty 2000).

2.10 From purchase to Customer Loyalty

The process of a customer buying a product or service to becoming loyal towards the company is a very important part, and is one that every company is trying to strengthen and improve.

The process is described by Mauro Cavallone (Marketing and customer loyalty p. 19) as a four step process containing the following steps:

Purchase, repeat purchase, retention, loyalty (Marketing and customer loyalty p.19).

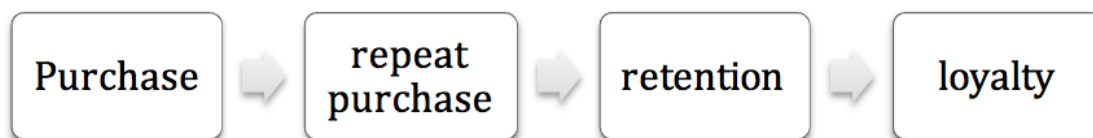


Figure 3

Purchase

The first step is purchase, which is also the first determination for a customer whether they want a product in their life and how much effort the customer is going to put in in order to own the product (Marketing and customer loyalty p.20)

- The concept of need
- The psychological process

Need Is described by **De Mauro 2007** as “the lack of something essential and useful” (Marketing and customer loyalty p.20). when purchasing something the consumer has to identify on what stage their need is in order for the customer to attach themselves to different offers that are provided for him/her as a potential customer.

The buying process described by Dalli and Romani 2000, is a five stage process that gives an overview of the thoughts and assumptions a customer makes before they purchase something (Mauro Cavallone 2017):

1. **Perception of need:** In this stage the customer is usually triggered by some internal or external factors, which makes the customer recognize the need.
2. **Gathering information:** The customer gathers information about available options that will satisfy his need.
3. **Assessment of the alternative:** The customer evaluates the offers given and decides the best alternative according to the need.
4. **Decision to buy:** The offer chosen by the customer is an expectation of the offer having higher value than perceived.
5. **Consumption and post purchase evaluation:** The offer chosen by the customer is being used and evaluated if it meets the expectation of satisfying the need.

The underlying factors from psychology, sociology and economics are complex to analyze, but the key is to understand the mental process the customer goes through when they make a decision on whether to buy a product or not. It is about understanding the customer's motivation which in the end is going to lead them into purchasing based on the need there is given. If the expectation meets the actual outcome the customer satisfaction will be the key factor combining the first step to the next which is repurchase (Mauro Cavallone 2017).

Repurchase

The next step is having the customer repurchasing a given product/service. There are, according to Cavallone (2000), two underlying factors of a customer repurchasing

- Achieving the satisfaction level desired through the first purchase.
- Lack in motivation when wanting to change as a consumer.

Mauro Cavallone describes the stage of purchase as a part of customer satisfaction. There are many definitions of customer satisfaction, Collesei (2006) describing it in the sentence "*customer*

satisfaction may be defined as the result of the comparison made by the customer between the benefits and the costs experienced and the benefits and costs expected, with regard to the set of components of a firm's given offer" (Collesei U – 2006 Marketing, 4th. Edition. Cedam, Padua)

Through definitions of customer satisfaction, the basic idea is a comparison of what the customer expects before purchasing a product against the actual outcome and what the customer gets after buying the product/service. (Mauro Cavallone 2017).

The measurement can be written as:

Percieved quality/Expectations ≥ 1 (Mauro Cavallone 2017 s. 27)

The equation above is described more analytically by Levitt (1983) as a function of three variables:

- Customer service
- Total quality management
- Relationship

Customer service is an important element for the customer, but it does not guarantee any success or loyalty by itself. Good customer service is not equal to satisfaction for the customer.

Total quality management is a good way to express quality for the company in general.

Relationship in order to achieve customer satisfaction, the company has to have a relationship with the customer based on knowledge and trust (Levitt T – 1983 After the sale is over. Harvard Bus Rev 61(1) Sep-Oct)

Cavallone (2000) talks about putting too much effort and resources in order to achieve a high level of customer satisfaction, but the costs that are attached to the action, is not always something customers are willing to pay extra for. (Mauro Cavallone 2017)

(Fig. 2.2 Mauro Cavallone 2017, p. 28):



Figure 4

The second factor when making a repurchase is the lack of motivation to change (Mauro Cavallone 2017).

According to Hawkins and Vel (2013) there are different factors affecting the decision of not changing a brand. It can be because of the access the customer has to go through in getting the brand, functionality of the product, the value the customer gets for the money and lastly the service attached when buying the product.

Specifically, this type of loyalty is called *behavioral loyalty* defined by Costabile (2001).

The lack of involvement from a customer is not always a good thing, even though it can be the reason for a repurchase.

Many other external factors as promotions, word of mouth, price and social relations (Mauro Cavallone 2017) can have an effect on the consumer. If a customer experiences something being better and satisfying their need better, the customer will eventually switch over to something else. (Mauro Cavallone 2017)

Retention

The next step in the process is for a company to retain the customer. It is not only in terms of making the customer repurchase a product or service, but it is more about the company being able to provide a strong customer relationship.

The step of retention is described in stages:

- The company using CRM
- Prevent customers from switching over to another option (detention)

The customer relationship management part is very highly used in this case to make the customer build a strong bond with the company, in order for the customer to stay for the longest time possible. (Mauro Cavallone 2017)

There are a lot of CRM strategies and marketing activities such as the use of social media – called Social CRM (as described earlier), that helps the company to monitor the involvement of the users and use it to build up a stronger business strategy (Choudhury and Harrigan 2016)

CRM is the key element when looking to have customer retention. As mentioned in the section Customer relationship management, the tools and activities a company use and put up in order to strengthen the bond between the company and the customer is a challenging task. One of the reasons for this is the fine line between encouraging the customer to buy something against pushing the customer and making the customer feeling forced. (Mauro Cavallone 2017)

Customer Loyalty

The last step is customer loyalty, which leads to the customer expressing his cognitive loyalty and not only the behavioral (Bowen and Chen 2001) (Mauro Cavallone 2017)

The three factors describing loyalty according to East 2003 is (Mauro Cavallone 2017):

- Attitudes – A positive mindset towards the brand.
- Preference – the product purchased from a specific brand is preferred over other alternatives, and also compared to other brands from the same category
- Allegiance (behavioral loyalty in the long term) - The customer is consistent in buying from the specific brand.

According to Tassinari (2003) there are three factor that leads to loyalty being; motivation, the evaluative process and satisfaction (Mauro Cavallone 2017 p. 36)

He also states that a customer has to be fully committed to the company in order to achieve loyalty and not being affected by the competitors. (Mauro Cavallone 2017)

Chapter 3 - Hypothesizes

3.1 Hypothesizes

In this part of the thesis, hypothesizes, made on behalf of the theory in the theory section” will be presented.

H1:

When a consumer is influenced by social media, then the consumer is more likely to purchase more beauty products online, than a consumer who isn't influenced.

We saw in the theory about **Social media** (Neil Woodcock, Andrew Green and Michael Starkey), that everyone today has the power to express themselves through different social media platforms online, this means that every consumer has the ability to review every product online if they wish too, without any disturbance from the company that produces the given product. This means that costumers has the ability to influence one another through social media into buying different beauty products. That is why it is more likely for a consumer who is highly influenced by the inspiration provided by other consumers and company's online to be tempted to purchase more beauty products online.

H2:

A consumer who mainly purchases makeup online is a consumer who is highly influenced by social media.

The availability of different beauty products differs from country to country. According to the **Social Media Theory** (Neil Woodcock, Andrew Green and Michael Starkey), we have that consumers can share reviews on different beauty products online with each other and through the social media platform they can inspire each other into purchasing more beauty products. Makeup especially is a big thing on social media with lots of tutorials on how to create different makeup looks. This is as well stated in the article:” *Some of these girls and boys on Youtube do the most beautiful things with makeup and it makes you want to buy everything*”¹⁵.

¹⁵ <https://www.nbcnews.com/business/consumer/going-rouge-how-beauty-brands-are-winning-e-commerce-n759431>

H3:

Service quality in terms of customer service is most important to the customers who do not purchase that many beauty products online.

We saw, that service quality was essential to understand the consumer in order to know what their needs and tendencies were, and thereby being able to satisfy them and therefore having great customer satisfaction (consumer behaviour p.62).

We further saw from the **Social Media Theory** (Neil Woodcock, Andrew Green and Michael Starkey), that company had switched their focus towards understanding their costumers and by that creating trust for the given company or brand.

When a consumer isn't very experienced in shopping online, then he/she hasn't yet established the necessary trust for the company and therefore they would be more likely to use customer service in order to make sure, that everything is as it should be.

H4:

A higher level of service quality increases a customer's trust.

We saw, that a company's focus switched towards understanding the costumer, with the aim of building trust (Neil Woodcock, Andrew Green and Michael Starkey). By doing that, they get an idea of the service level the customer expects at the same time, so that there isn't a gap between what the customer expects, and the service quality level the company provides (Handbook of customer satisfaction and loyalty measurements, Nigel Hill and Jim Alexander). We therefore have that the customer's trust will increase with an increase in the service quality level.

H5:

A higher level of service quality increases customer loyalty.

As we saw in (operations management p.414) different consumers can have different expectations towards a specific brand, so in order for the company to keep the costumer happy and satisfied with a product the company has to reach specific standards. We further saw that satisfied customers were more likely to be loyal to a brand, even oversee minor differences, which was the reason why it was so important for a company to reach the standards of their customers (E – commerce managerial perspective p.85).

Chapter 4 – Methodology

4.1 Research methodology

The methodology framework for the entire thesis is based on a quantitative research process (business research methods p. 69).

1. Theory
2. Hypothesis
3. Research design
4. Devise measures of concepts
5. Select research sites(s)
6. Select research subjects/respondents
7. Administer research instruments/collect data
8. Process data
9. Analyse data
10. Findings/conclusions
11. Write up findings/conclusions

The aim of this thesis is to answer the main research question by either validate or invalidate the made hypothesizes regarding customer satisfaction within e - commerce. The hypothesizes were made on the basis of read theories concerning customer satisfaction and e - commerce.

The hypothesizes were either validated or invalidated on the basis of a self made survey. The data gathered within the survey was the data used to validate or invalidate the hypothesizes.

4.2 Survey and questionnaire

The survey was based on a questionnaire¹⁶, in which the important factor was, that the questions were designed in such a way, that they could give clear and direct answers to the hypothesizes.

The questions within the questionnaire were likewise designed on the basis of the read theories on customer satisfaction and e – commerce.

¹⁶ See Appendix 4

The nature of the questions was closed questions *“Closed questions give respondents a fixed selection of answers to choose from. They are quick and easy to administer and analyse, offer the least scope for interviewer or respondent error and produce quantifiable data”* (p.117; Nigel Hill and Jim Alexander), with the opportunity to answer with a different points verbal scale. The points of the scale depended on how many answers, there where to choose from. *“...verbal scales are very easy to understand and the most respondent friendly of all the options”* (p. 128; Nigel Hill and Jim Alexander). The questionnaire further consisted of classification questions *“Classification questions ... are used for the purpose of segmentation”* (p. 121; Nigel Hill and Jim Alexander), in order to classify different segments in regard to their consumer behavior patterns when buying beauty products online. The questionnaire consisted of 28 questions and the online platform used for the questionnaire is called SurveyMonkey, where it was easy to design the questions and the questionnaire in the way desired.

4.3 Sampling

In order to maximize responses from the desired segment, the answers were sampled through social media. The questionnaire was shared in different beauty groups on Facebook, so that it was possible to gather as many respondents interested in beauty products and at the same time respondents who used social media.

4.4 Results

The hypothesizes have been tested with Logistic regression and Chi squared test of independence based on the quantitative data, that was gathered through the survey using Excel and Rstudio.

Chapter 5 – Findings and data analysis

5.1 Data analysis

In this part of the thesis we are going to break down data, and apply the appropriate statistical tests to each hypothesis using Excel and Rstudio.

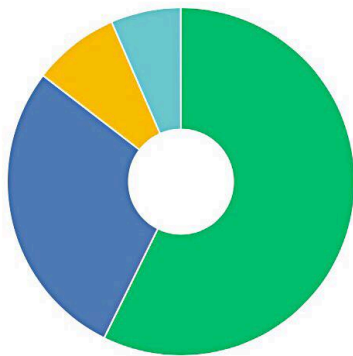
5.2 Number of respondents

When collecting the data, we were able to collect 200 responses to use as our data sample size. The result of the sample size was, that there was only 13 men who responded, so those respondents were removed from the sample size. Further any questionnaire which wasn't fully filled out were likewise removed from the sample size. This means that the data sample size from which the entire data analysis is going to be made from is a total of 134.

5.3 Age bracket

The age bracket in which the survey was conducted was among customers who were at least 18 years old, and the highest age was 45. We see, that the largest group of respondents is the age group of 18-25, and the smallest group of respondents is the group 37-45.

2. Alder



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Figure 5

18-25	57,29%	114
26-30	28,14%	56
31-36	8,04%	16
37-45	6,53%	13

Table 1

5.4 H1:

When a consumer is influenced by social media, then the consumer is more likely to purchase more beauty products online, than a consumer who isn't influenced.

In order to verify whether our hypothesis is true a chi squared test of independence is used. It is made between the variable Influence and several other variables that relate to this hypothesis.

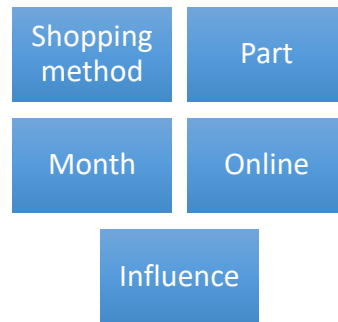


Figure 6

The Chi squared test of independence is performed due to the fact that all the variables are categorical (Mathematical Statistics with Applications; p. 714). So with the Chi squared test, we are going to test whether there is a dependent relationship between the two categorical variables per test performed.

Each variable that is used is made from a specific question of relevance from the survey and further a relevant name is given for every variable based on the nature of the question.

So the variable “Influence” comes from question 19 in the survey, which is: “How often do Social Media influence your purchases of beauty products? “.

The first test is made between question 19 and question 7. These are: “How often do Social Media influence your purchases of beauty products? “and “Within this latest month, how many times have you purchased beauty products online?”.

The names given are “Influence” and “Month”.

We firstly use a contingency table to examine and get an overview between the two variables, and it looks as follows:

			Month			
		Never	1-2	3-4	>4	Total
	Always	4	5	0	1	10
Influence	Very often	13	10	3	0	26
	Often	25	23	1	3	52
	Almost never	30	8	2	0	40
	Never	4	2	0	0	6
	Total	76	48	6	4	134

Table 2

Just from plotting our data together in a contingency table we are able to see some relationships in our data. We see that 30 consumers who didn't buy any beauty products within the last month are almost never influenced by social media when they buy beauty products. We also see that 25 who answered that they often are influenced by social media when buying beauty products also didn't purchase any beauty products online within the last month. So we can't depict a clear relationship just from this contingency table. So are going to perform our Chi squared test of independence to see if there is any significant relationship between these two categorical variables.

The null hypothesis is that "Influence" and "Month" are independent in other words, there is no dependency between being influenced by social media and your shopping habits of beauty products within the last month.

The alternative hypothesis is that "Influence" and "Month" are not independent and the significance level is set at 0,05.

##Chi squared test of Independence

#Making the vectors

```
Always= c(4,5,0,1)
```

```
VeryOften= c(13,10,3,0)
```

```
Often= c(25,23,1,3)
```

```
AlmostNever= c(30,8,2,0)
```

```
Never= c(4,2,0,0)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Influence.Month = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))
```

```
#Giving the columns names within the data frame
```

```
names(Influence.Month) = c('Never', '1-2', '3-4', '>4')
```

```
chisq.test(Influence.Month)
```

Pearson's Chi-squared test

```
data: Influence.Month
```

```
X-squared = 17.832, df = 12, p-value = 0.1209
```

From the output of the Chi squared test of independence we have a p – value of 0,1209. This value is higher then the significance level which is 0,05. That means that we accept the null hypothesis and say that there is and independent relationship between “Influence” and “Month”, again, with other words these two variables are not significantly related and there is no relationship between them.

To further see the percentage relationship between the categorical variables “Influence” and “Month” can make a relative frequency table.

	Never	1-2	3-4	>4
Always	4/76= 0,05263158	5/48= 0,1041667	0/6= 0	1/4= 0,25
Very often	13/76= 0,1710526	10/48= 0,2083333	3/6= 0,5	0/4= 0
Often	25/76= 0,3289474	23/48= 0,4791667	1/6= 0,1666667	3/4= 0,75
Almost never	30/76= 0,3947368	8/48= 0,1666667	2/6= 0,3333333	0/4= 0
Never	4/76= 0,05263158	2/48= 0,04166667	0/6= 0	0/4= 0

Table 3

			Month			
		Never	1-2	3-4	>4	
	Always	5,3%	10,4%	0%	25%	
Influence	Very often	17,1%	20,8%	50%	0%	
	Often	32,9%	47,9%	16,7%	75%	
	Almost never	39,5%	16,7%	33,3%	0%	
	Never	5,2%	4,2%	0%	0%	

Table 4

With this frequency table we get an overview between the percentage relationship between the variables. As the Chi squared test of independence showed us, that there was no significant relationship between the two variables we are not going to bring any further attention to the relationship between these two variables.

We are now going to take a look at the relationship between “Influence” and “Online” stemming from questions 19 and 8 within the questionnaire. The questions are as follows: “How often do Social Media influence your purchases of beauty products?” and “How many of your beauty products do you purchase online?”.

The contingency table looks as follows:

			Online			
		All	Half	Under half	None	Total
	Always	3	3	1	3	10
	Very often	6	10	7	3	26
Influence	Often	2	16	28	6	52
	Almost never	0	5	26	9	40
	Never	0	1	3	2	6
	Total	11	35	65	23	134

Table 5

From just looking at the contingency table we see, that we have from the sample that people mostly answered that they buy under half of their beauty products online with a total number in column “Under half” of 65.

Again to see if there is a dependency relationship between the two variables the Chi squared test of independence is performed.

Again, the null hypothesis is that “Influence” and “Online” are independent in other words, there is no dependency between being influenced by social media and how many of your beauty products you buy online.

The alternative hypothesis is that “Influence” and “Online” are not independent and the significance level is set at 0,05.

##Chi squared test of Independence

#Making the vectors

Always= c(3,3,1,3)

VeryOften= c(6,10,7,3)

Often= c(2,16,28,6)

AlmostNever= c(0,5,26,9)

Never= c(0,1,3,2)

#Putting the row vectors together in order to make matrices,

#and converting the matrix into a data frame.

Influence.Online = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))

#Giving the columns names within the data frame

names(Influence.Online) = c('All', 'Half', 'UnderHalf', 'None')

chisq.test(Influence.Online)

Pearson's Chi-squared test

data: Influence.Online

X-squared = 34.899, df = 12, p-value = 0.000486

From the above R – output of the test, we see that the p – value = 0,000486 is below the significance value of 0,05. That means that the null hypothesis can not be accepted and that there indeed is a relationship between “influence” and “Online”. In words, there is a relationship with being influenced by social media and how many of one’s beauty purchased is made online.

We will explore the relationship further, again, by making a relative frequency table.

	All	Half	Under half	None
Always	3/11= 0,2727273	3/35= 0,08571429	1/65= 0,01538462	3/23= 0,1304348
Very often	6/11= 0,5454545	10/35= 0,2857143	7/65= 0,1076923	3/23= 0,1304348
Often	2/11= 0,1818182	16/35= 0,4571429	28/65= 0,4307692	6/23= 0,2608696
Almost never	0/11= 0	5/35= 0,1428571	26/65= 0,4	9/23= 0,3913043
Never	0/11= 0	1/35= 0,02857143	3/65= 0,04615385	2/23= 0,08695652

Table 6

			Online			
		All	Half	Under half	None	
	Always	27,3%	8,6%	1,5%	13%	
	Very often	54,5%	28,6%	10,8%	13%	
Influence	Often	18,1%	45,7%	43%	26%	
	Almost never	0%	14,3%	40%	39,1%	
	Never	0%	2,8%	4,6%	8,7%	

Table 7

From the above table, we can see a very interesting relationship. We see, that 54,5% of the respondents who are very influenced by social media also tend to buy all their beauty products online. Another interesting thing is that 39,1% of the respondents who are almost never influenced by social media buy none of their beauty products online. And, then we see that 45,7% of the respondents who are often influenced by social media buy half of their beauty products online.

Now, we will look at the relationship between “Influence” and “Shopping method”. These two categorical variables come from question 19 and 9 in the questionnaire. The questions are as following: “How often do Social Media influence your purchases of beauty products?” and “What is your preferred way of shopping beauty products?”.

The contingency table between the variables is as follows:

		Shopping method			
		Online	Physical store	Both	Total
	Always	5	1	4	10
	Very Often	6	8	12	26
Influence	Often	6	29	17	52
	Almost never	1	31	8	40
	Never	0	5	1	6
	Total	18	74	42	134

Table 8

The interesting information we can derive from this table is, that the majority of our respondents actually prefers to shop beauty products in physical stores, we see that with 74 of the respondents answering that. We also see, that only 18 of the respondents prefer shopping online. Now as before a Chi squared test of independence is made to test the relationship between the two variables.

Our null hypothesis is that “Influence” and “Shopping method” are independent in other words, there is no dependency between being influenced by social media and the respondents preferred way to shop beauty products.

The alternative hypothesis is that “Influence” and “Shopping method” are not independent and the significance level is set at 0,05.

```
##Chi squared test of Independence
```

```
#Making the vectors
```

```
Always= c(5,1,4)
```

```
VeryOften= c(6,8,12)
```

```
Often= c(6,29,17)
```

```
AlmostNever= c(1,31,8)
```

```
Never= c(0,5,1)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Influence.ShoppingMethod = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))
```

```
#Giving the columns names within the data frame
```

```
names(Influence.ShoppingMethod) = c('Online','PhysicalStore','Both')
```

```
chisq.test(Influence.ShoppingMethod)
```

Pearson's Chi-squared test

```
data: Influence.ShoppingMethod
```

```
X-squared = 31.377, df = 8, p-value = 0.0001204
```

From the test we get a p-value of 0,0001204 which means that the p-value is lower than our significance value of 0,05. This also means that we can't accept the null hypothesis, and that there is a statistically significant relationship between the two variables. So in words the preferred way to shop according to the respondents is influenced by how they are influenced by social media. We will explore the relationship further, again, by making a relative frequency table

	Online	Physical store	Both
Always	5/18= 0,2777778	1/74= 0,01351351	4/42= 0,0952381
Very Often	6/18= 0,3333333	8/74= 0,1081081	12/42= 0,2857143
Often	6/18= 0,3333333	29/74= 0,3918919	17/42= 0,4047619
Almost never	1/18= 0,05555556	31/74= 0,4189189	8/42= 0,1904762
Never	0/18= 0	5/74= 0,06756757	1/42= 0,02380952

Table 9

		Shopping method			
		Online	Physical store	Both	
	Always	27,8%	1,3%	9,5%	
	Very Often	33,3%	10,8%	28,6%	
Influence	Often	33,3%	39,2%	40,5%	
	Almost never	5,5%	41,9%	19%	
	Never	0%	6,8%	2,4%	

Table 10

Here we see, that the majority of the respondents who were often influenced by social media mostly liked shopping both ways with a percentage of 40,5 %. We also see, that respondents who are almost never influenced by social media prefer to shop in physical stores with a percentage of 41,9%. So we see, that the most preferred way is both for influenced consumers, and in physical stores for consumers who aren't influenced.

We will now take a look at the variables "Influence" and "Part", these variables come from the questions 19 and 12 within the questionnaire.

The questions look like this: "How often do Social Media influence your purchases of beauty products?" and "how big of a part of that goes to shopping beauty products online?", and the contingency table looks like this:

			Part				
		1/4	1/2	>1/2	All purchases	Don't know	Total
	Always	5	3	0	1	1	10
	Very often	9	8	0	4	5	26
Influence	Often	32	11	1	3	5	52
	Almost never	24	5	0	2	9	40
	Never	2	1	0	0	3	6
	Total	72	28	1	10	23	134

Table 11

Purely from looking at the table we see that the majority of the respondents bought only $\frac{1}{4}$ of their beauty products online, and only 10 of the respondents bought all of their beauty products online. Again to test whether we have a significant relationship between the two variables we are going to perform a Chi squared test of independence.

The null hypothesis is that "Influence" and "Part" are independent which means, that there is no dependency between being influenced by social media and the partially amount of beauty products the respondents buy online.

The alternative hypothesis is that "Influence" and "Part" are not independent and the significance level is set at 0,05.

```
##Chi squared test of Independence
```

```
#Making the vectors
```

```
Always= c(5,3,0,1,1)
```

```
VeryOften= c(9,8,0,4,5)
```

```
Often= c(32,11,1,3,5)
```

```
AlmostNever= c(24,5,0,2,9)
```

```
Never= c(2,1,0,0,3)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Influence.Part = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))
```

```
#Giving the columns names within the data frame
```

```
names(Influence.Part) = c('1/4','1/2','>1/2','AllPurchases','Dontknow')
```

```
chisq.test(Influence.Part)
```

Pearson's Chi-squared test

```
data: Influence.Part
```

```
X-squared = 17.498, df = 16, p-value = 0.3541
```

Looking at our p-value above, we see that its higher than the significance level of 0,05, with a value of 0,3541. This means that we are going to accept the null hypothesis and conclude that there is an independent relationship between the two variables “Influence” and “Part”. This further means that these two variables are not significantly related. Since our Chi squared test of independence told us, that there wasn’t a significant relationship between these variables we are not going to explore the data between “Influence” and “Part” any further.

When we look back at our hypothesis: “When a consumer is influenced by social media, then the consumer is more likely to purchase more beauty products online, than a consumer who isn’t “influenced”, we see that purely from our data analysis that question 8 did verify that there was a relationship between the how influenced a consumer was and how many of their beauty products they bought online. We saw that mainly consumers who were often influenced by social media (45,7%) bought half of their beauty products online, while over 50% of consumers who were very often influenced by social media bought all of their beauty products online and interesting enough that consumers who were almost never influenced by social media bought none of their beauty products online, with a percentage of 39,1%. This means that the hypothesis is verified by this

test, and we do see that consumers who are more influenced do purchase more of their beauty products online. We further saw, that the preferred way of shopping also verified our hypothesis. When we took a look at the consumers that were influenced, they preferred both ways, but to them physical stores came on a second place. The interesting thing also was that a consumer who was very often influenced by social media preferred online shopping opposed to physical stores with a percentage of 33,3%. So, again, the hypothesis is verified, that there is a relationship between being influenced by social media and buying more beauty products online, by question 19 vs. 8 and 19 vs. 9.

		Shopping method			
		Online	Physical store	Both	
	Always	27,8%	1,3%	9,5%	
	Very Often	33,3%	10,8%	28,6%	
Influence	Often	33,3%	39,2%	40,5%	
	Almost never	5,5%	41,9%	19%	
	Never	0%	6,8%	2,4%	

Table 12

5.5 H2:

A consumer who mainly purchases makeup online is a consumer who is highly influenced by social media.

Like hypothesis H1, in order to verify this hypothesis a Chi squared test of independence is used because we are working with categorical data. To begin with we will take a look at the relationship between how influence by social media a consumer is and what kind of beauty product they tend to buy the most.



Figure 7

firstly, a contingency table is made between the categorical variables “Influence” and “Beauty” stemming from question 19 and 13. These are: “How often do Social Media influence your purchases of beauty products?” and “When you purchase beauty products online, from which category do you buy the most from?”.

The contingency table looks as follow:

		Beauty			
		Hair products	Skin care	Makeup	Total
Influence	Always	2	0	8	10
	Very often	7	5	14	26
	Often	9	13	30	52
	Almost never	9	15	14	38
	Never	1	1	4	6
Total		28	34	70	132

Table 13

We already see from our contingency table, that most of the respondents mostly buy makeup when they shop for beauty products online. With 70 of the respondents out of 132 answering that. Now we will take a look at the Chi squared test of independence to test the dependency between the variables.

The null hypothesis is that “Influence” and “Beauty” are independent in other words, there is no dependency between being influenced by social media and what kind of beauty item you buy the most of.

The alternative hypothesis is that “Influence” and “Beauty” are not independent and the significance level is set at 0,05.


```
##Chi-squared test of independence
```

```
#Making the vectors
```

```
Always = c(2,0,8)
```

```
VeryOften = c(7,5,14)
```

```
Often = c(9,13,30)
```

```
AlmostNever = c(9,15,14)
```

```
Never = c(1,1,4)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Beauty.Influence = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))
```

```
#Giving the columns name within the data frame
```

```
names(Beauty.Influence) = c('HairProducts', 'SkinCare', 'Makeup')
```

```
chisq.test(Beauty.Influence)
```

Pearson's Chi-squared test

```
data: Beauty.Influence
```

```
X-squared = 10.61, df = 8, p-value = 0.2248
```

from the R – output we see, that the p –value is higher than the significance level of 0,05. This means that the null hypothesis is accepted, and that there is an independent relationship between the two categorical variables. So these are not significantly related.

This further means that our hypothesis is rejected, since there is no relationship between mostly buying makeup online and being highly affected by social media.

Even though we reject our hypothesis we are going to analyze the relationship between these two variables a little further. We do that by looking at the frequency table.

	Hair products	Skin care	Makeup
Always	2/28=0,07142857	0/34=0	8/70=0,1142857
Very often	7/28=0,25	5/34=0,1470588	14/70=0,2
Often	9/28=0,3214286	13/34=0,3823529	30/70=0,4285714
Almost never	9/28=0,3214286	15/34=0,4411765	14/70=0,2
Never	1/0,03571429	1/34=0,02941176	4/70=0,05714286

Table 14

		Beauty			
		Hair products	Skin care	Makeup	
	Always	7,1%	0%	11%	
Influence	Very often	25%	15%	20%	
	Often	32%	38%	43%	
	Almost never	32%	44%	20%	
	Never	3,6%	3%	6%	

Table 15

What we see by looking at the percentages we do see that 43 % of the consumers who are often influenced by social media mainly buys makeup online. We also see that consumers who are almost never influenced by social media mostly buy skin care online, with a percentage of 44 %. Further we have that consumers who are very often influenced by social media mostly buy hair products online, with a percentage of 25%. But, as our Chi squared test showed, there is no significant relationship between the two variables and we can therefore not verify this hypothesis.

5.6 H3:

Service quality in terms of customer service is most important to the customers who do not purchase that many beauty products online.

In order to test this hypothesis, we are going to use the following question: 7,8,9,11,14,15,16 and 28. The questions are as follows:

7: "Within this latest month, how many times have you purchased beauty products online?",

8: "How many of your beauty products do you purchase online?",

9: "What is your preferred way of shopping beauty products?",

11: "How much money do you spend, on average, on beauty products pr. month?".

14: " Hair products?".

15: "Skin care?".

16: "Makeup"

28: "How often do you make use of customer service when you purchase beauty products online?".

The way the test is going to be conducted is that question 28, is going to be the response variable. Since it's a binary variable a logistic regression is going to be used (An Introduction to Generalized Linear Models, p.123) . There will be a test with each independent variable by itself. So question 28 will be tested with question 7 and so on. the variable coming from question 7, will be called "A", question 8 "B", question 9 "C", question 11 "D", question 14 "E", question 15 "F", question 16 "G" and question 28 "H".

The independent variables from A-C are categorical with A-B having 4 levels (4 possible answers to the question, and C having 3 levels.

The variables from D-G are going to be continuous, even though they were of categorical nature within the questionnaire. So, as an example, if the possible answer to question 11 is:

1: 0-299

2: 300 – 599

3: 600 – 899

4: 900 – 1299

5: 1300 – 1599

6: 1600 – 1899

7: 1900+ ,

a respondent answering 2:300-599, the value within R will be set at 599. The response variable coming from question 28 is binary, taking on the values "1" or "2". Answering 1 is: "I do make use of customer service after every time I buy something, in order to confirm my purchase", and answering 2 is: "I only make use of customer service, when I am not sure, or there is some problem with my purchase".

The logistic test looks as follows:

The data frame:

```

#Reading the dataset logistic

Logistic <- read.table(file.choose(), header=F)
Logistic

#Giving the data names

colnames(Logistic) <- c(
  "A",
  "B",
  "C",
  "D",
  "E",
  "F",
  "G",
  "H"
)
Logistic

#Checking the variables
str(Logistic)

#Transforming variables A,B,C and H into factors
Logistic$A <- as.factor(Logistic$A)
Logistic$B <- as.factor(Logistic$B)
Logistic$C <- as.factor(Logistic$C)
Logistic$H <- as.factor(Logistic$H)

str(Logistic)

> str(Logistic)
'data.frame': 134 obs. of 8 variables:
 $ A: Factor w/ 4 levels "1","2","3","4": 1 1 2 2 1 1 1 1 2 ...
 $ B: Factor w/ 4 levels "1","2","3","4": 3 2 2 2 3 3 2 3 2 3 ...
 $ C: Factor w/ 3 levels "1","2","3": 3 1 1 3 2 2 3 2 3 2 ...
 $ D: int 599 1299 299 599 299 299 299 599 299 599 ...
 $ E: int 99 99 99 99 99 99 99 99 99 299 ...
 $ F: int 499 99 299 299 299 99 299 299 99 499 ...
 $ G: int 499 99 499 299 299 499 299 299 99 500 ...
 $ H: Factor w/ 2 levels "1","2": 2 2 2 1 2 2 2 2 2 2 ...
>

```

Modelling:

Model1

```

#Making logistic regression with H as the response variable
# and the others as independent variables.

LogisticModel1 <- glm(H ~ A, data=Logistic, family="binomial")
summary(LogisticModel1)
#No significance

```

R-output:

```
Call:
glm(formula = H ~ A, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.5425   0.2838   0.2838   0.4690   0.4690

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)   3.1918     0.5891   5.418 6.02e-08 ***
A2            -1.0401     0.7552  -1.377   0.168
A3            15.3742    2662.8561   0.006   0.995
A4            15.3742    3261.3194   0.005   0.996
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 57.350  on 130  degrees of freedom
AIC: 65.35

Number of Fisher Scoring iterations: 17
```

Model2

```
LogisticModel2 <- glm(H ~ B, data=Logistic, family="binomial")
summary(LogisticModel2)
#No significance

Call:
glm(formula = H ~ B, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.38043   0.00005   0.00005   0.34821   0.63352

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept) 1.504e+00  7.817e-01   1.924   0.0544 .
B2           1.269e+00  1.069e+00   1.187   0.2353
B3           1.906e+01  2.182e+03   0.009   0.9930
B4           5.407e-02  9.559e-01   0.057   0.9549
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 46.898  on 130  degrees of freedom
AIC: 54.898

Number of Fisher Scoring iterations: 19
```

Model3

```
LogisticModel3 <- glm(H ~ C, data=Logistic, family="binomial")
summary(LogisticModel3)
#No significance
```

```

Call:
glm(formula = H ~ C, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.9293   0.1661   0.1661   0.4419   0.6039

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)  1.6094     0.6325   2.545   0.0109 *
C2           2.6672     1.1891   2.243   0.0249 *
C3           0.6678     0.8220   0.812   0.4165
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 53.402  on 131  degrees of freedom
AIC: 59.402

Number of Fisher Scoring iterations: 7

```

Model 4

```

LogisticModel4 <- glm(H ~ D, data=Logistic, family="binomial")
summary(LogisticModel4)
#No significance

Call:
glm(formula = H ~ D, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.4738   0.3099   0.3099   0.3538   0.6177

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)  3.2830317  0.6642877   4.942 7.73e-07 ***
D           -0.0009069  0.0008741  -1.038   0.299
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 59.687  on 132  degrees of freedom
AIC: 63.687

Number of Fisher Scoring iterations: 5

```

Model 5

```

LogisticModel5 <- glm(H ~ E, data=Logistic, family="binomial")
summary(LogisticModel5)
#No significance

```

```

Call:
glm(formula = H ~ E, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.6031   0.2621   0.2621   0.4210   0.6643

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)  3.836180   0.740332   5.182 2.2e-07 ***
E            -0.004874   0.002430  -2.006  0.0449 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 56.827  on 132  degrees of freedom
AIC: 60.827

Number of Fisher Scoring iterations: 6

```

Model 6

```

LogisticModel6 <- glm(H ~ F, data=Logistic, family="binomial")
summary(LogisticModel6)
#No significance

Call:
glm(formula = H ~ F, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.5090   0.2964   0.3584   0.3584   0.4328

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)  3.296683   0.799444   4.124 3.73e-05 ***
F            -0.001951   0.002400  -0.813   0.416
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 59.949  on 132  degrees of freedom
AIC: 63.949

Number of Fisher Scoring iterations: 5

```

Model 7

```
LogisticModel7 <- glm(H ~ G, data=Logistic, family="binomial")
summary(LogisticModel7)
#No significance

Call:
glm(formula = H ~ G, family = "binomial", data = Logistic)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.4567   0.3167   0.3486   0.3835   0.3837

Coefficients:
            Estimate Std. Error z value Pr(>|z|)
(Intercept)  3.0651108  0.8498836   3.607  0.00031 ***
G            -0.0009867  0.0023784  -0.415  0.67826
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 60.607  on 133  degrees of freedom
Residual deviance: 60.433  on 132  degrees of freedom
AIC: 64.433

Number of Fisher Scoring iterations: 5
```

As all the testing showed, there is no significant relationship between the response variable “H” and the other independent variables. So the hypothesis cannot be verified, with other words, the importance of customer service has no relation to how many beauty products the respondents buy online.

To further investigate why there is no significant relationship between the importance of customer service and how many beauty products a customer buy online, we are going to make a histogram over how many of the respondents choose option 1 or 2. The histogram is made by using excel.

Bin	Frequency
1	8
2	126
More	0

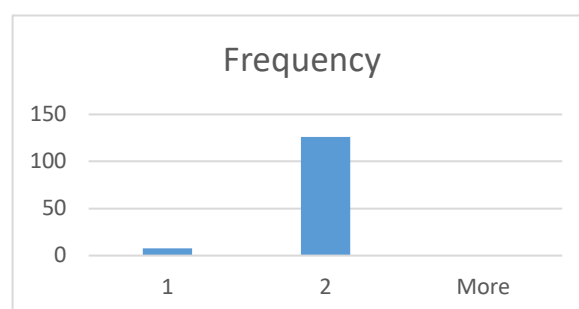


Table 16

When we take a look at the histogram, we see, that out of the 134 respondents 126 chose option 2, which was “I only make use of customer service, when I am not sure, or there is some problem with my purchase”, that is a percentage of $126/134 = 0,94 = 94 \%$. So this is another way of seeing why the hypothesis couldn’t get verified.

5.7 H4:

A higher level of service quality increases a customer’s trust.

In order to test whether this hypothesis holds we are going to use question 22 and question 25 from the questionnaire. Question 22 is as follows: “How safe do you feel, when you shop online (in terms of using you credit card)?”. This question has 4 possible responses, Very safe, Safe, Not so safe, Not safe at all and indifferent. This question is used as a categorical variable, and is given the name “Trust”. Question 25 is: “Which 3 factors are most important to you, according to the website, when you buy beauty products online?”. The respondent has the following choices when answering this question:

A wide range of beauty products,
Good customer service,
Fast delivery,
Clear and manageable website,
Cheaper prices.

The already mentioned answers to this question are all treated as a dummy variable. So each answer can take on the value “1” or “0”. Which means If the respondent chooses one of the answers as being an important factor when they buy beauty products online, its going to have the value 1, and if the option is not being chosen, its going to have the value 0. Each dummy variable is going to be tested in a chi squared test of independence against the categorical variable “Trust” stemming from question 22.

The first test is made between the answer: “A wide range of beauty products”, given the name “ProductRange” and the categorical variable trust. The contingency table looks as follows:

		ProductRange		
		1	0	Total
	Very safe	37	12	49
Trust	Safe	43	23	66
	Not so safe	6	3	9
	Not safe at all	3	2	5
	Indifferent	4	1	5
	Total	93	41	134

Table 17

What we get out of just looking at the contingency table is that $93/134 = 0,69 = 69\%$ of the respondents choose ProductRange as being an important factor when they purchased beauty products online. So that in itself shows that a wide array of products available online has an important impact. But as the hypothesis states, we would like to see if there is a significant relationship between the two variables, and the chi test looks as the following.

The null hypothesis is, that “Trust” and “ProductRange” are independent, and the alternative hypothesis is, that “Trust” and “ProductRange” are not independent, and we set our significance level at 0,05 again.

##Chi squared test of Idependence

#Making the vectors

VerySafe= c(37,12)

Safe= c(43,23)

NotSoSafe= c(6,3)

NotSafeAtAll= c(3,2)

Indifferent= c(4,1)

#Putting the row vectors together in order to make matrices,

#and converting the matrix into a data frame.

Trust.ProductRange = as.data.frame(rbind(VerySafe, Safe, NotSoSafe, NotSafeAtAll, Indifferent))

#Giving the columns names within the data frame

names(Trust.ProductRange) = c('1','0')

chisq.test(Trust.ProductRange)

Pearson's Chi-squared test

```
data: Trust.ProductRange  
X-squared = 1.9268, df = 4, p-value = 0.7492
```

As the R – output shows, we have a p – value that is higher than the significance value, which means, that we are going to accept the null hypothesis, and say that the variables “Trust” and “ProductRange” are independent.

We will now take a look at “Trust” compared to “CustomerService”. As always we will get an overview of the data, by making a contingency table.

		CustomerService		
		1	0	Total
	Very safe	17	33	50
Trust	Safe	25	40	65
	Not so safe	2	7	9
	Not safe at all	4	1	5
	Indifferent	3	2	5
	Total	51	83	134

Table 18

From the data we see, that the majority of the respondents did not particularly value good customer service as an important factor, we see, that $83/134 = 61,9 = 61,9\%$ didn't choose this factor. We will now test the relationship between the variables. The null hypothesis is that “Trust” and “CustomerService” are independent, and the alternative hypothesis is, that “Trust” and “CustomerService” are not independent, and we set our significance level at 0,05 again.

```
##Chi squared test of Idependence
```

```
#Making the vectors
```

```
VerySafe= c(17,33)
```

```
Safe= c(25,40)
```

```
NotSoSafe= c(2,7)
```

```
NotSafeAtAll= c(4,1)
```

```
Indifferent= c(3,2)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Trust.CustomerService = as.data.frame(rbind(VerySafe, Safe, NotSoSafe, NotSafeAtAll, Indifferent))
```

```
#Giving the columns names within the data frame
```

```
names(Trust.CustomerService) = c('1', '0')
```

```
chisq.test(Trust.CustomerService)
```

Pearson's Chi-squared test

```
data: Trust.CustomerService
```

```
X-squared = 6.0633, df = 4, p-value = 0.1945
```

The outcome of the test is, that there is no significant relationship between the two variables, since the p – value exceeds the significance level 0,05 with a level of 0,1945. This means that we accept the null hypothesis, and say that there is an independent relationship between the two variables “Trust” and “CustomerService”.

We will now proceed to look at how important a fast delivery is. The contingency table looks as follows:

		Delivery		
		1	0	Total
	Very safe	29	20	49
Trust	Safe	38	28	66
	Not so safe	8	1	9
	Not safe at all	3	2	5
	Indifferent	3	2	5
	Total	81	53	134

Table 19

When looking at the percentage, we have that $81/134 = 0,60 = 60\%$ of the respondents favor a fast delivery, and that $53/134 = 0,39 = 39\%$ of the respondents don't find that particular factor to be of much importance. Let us see, if there is a relationship with trusting and how fast an order is

delivered. As the other times the chi squared test of independence is used. The null hypothesis is, that “Trust” and “Delivery” are independent, and the alternative hypothesis is, that “Trust” and “Delivery” are not independent, and we set our significance level at 0,05 again.

```
##Chi squared test of Idependence
```

```
#Making the vectors
```

```
VerySafe= c(29,20)
```

```
Safe= c(38,28)
```

```
NotSoSafe= c(8,1)
```

```
NotSafeAtAll= c(3,2)
```

```
Indifferent= c(3,2)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Trust.Delivery = as.data.frame(rbind(VerySafe, Safe, NotSoSafe, NotSafeAtAll, Indifferent))
```

```
#Giving the columns names within the data frame
```

```
names(Trust.Delivery) = c('1','0')
```

```
chisq.test(Trust.Delivery)
```

Pearson's Chi-squared test

```
data: Trust.Delivery
```

```
X-squared = 3.3063, df = 4, p-value = 0.5079
```

We do again from the output see, that we can accept the null hypothesis with a p – value of 0,5079. This means that there is no dependent relationship between these two variables.

We will now proceed to look at how important the design of a website is as a factor for the respondents and if there is a dependency between the variable “Trust” and “Website”.

As previously a contingency table is made.

		Website		
		1	0	Total
	Very safe	14	35	49
Trust	Safe	35	31	66
	Not so safe	4	5	9
	Not safe at all	1	4	5
	Indifferent	1	4	5
	Total	55	79	134

Table 20

From the data we see, that the majority did not choose this factor as being very important. With a percentage of $79/134 = 0,59 = 59\%$. We further see that $55/134 = 0,41 = 41\%$ of the respondents choose this factor to be important, which is under half of the respondents. Testing the relationship between the variables, the null hypothesis is: “Trust” and “Website” are independent, and the alternative hypothesis is, that “Trust” and “Website” aren’t independent, and we set our significance level at 0,05 again.

##Chi squared test of Idependence

#Making the vectors

```
VerySafe= c(14,35)
```

```
Safe= c(35,31)
```

```
NotSoSafe= c(4,5)
```

```
NotSafeAtAll= c(1,4)
```

```
Indifferent= c(1,4)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
Trust.Website = as.data.frame(rbind(VerySafe, Safe, NotSoSafe, NotSafeAtAll, Indifferent))
```

```
#Giving the columns names within the data frame
```

```
names(Trust.Website) = c('1','0')
```

```
chisq.test(Trust.Website)
```

Pearson's Chi-squared test

```
data: Trust.Website
```

```
X-squared = 8.9419, df = 4, p-value = 0.06257
```

From the output above we see, that the p –value is 0,06257 which means that we are going to accept the null hypothesis, and say that the variables are independent. Which again means, that there is no dependency relationship between these two variables.

We will now see if customer trust has something to do with the prices of the beauty products they buy online. A contingency table from these variables looks as follows:

		CheaperPrice		
		1	0	Total
	Very safe	33	16	49
Trust	Safe	38	28	66
	Not so safe	6	3	9
	Not safe at all	0	5	5
	Indifferent	2	3	5
	Total	79	55	134

Table 21

Purely from looking at the contingency table we see that the majority value cheaper prices with a percentage of $79/134 = 0,59 = 59\%$. We further see, that 41% do not see that a cheaper price is that important. We will now make the chi squared test of independence to check the relationship between the variables. The null hypothesis is that “Trust” and “CheaperPrice” are independent and the alternative hypothesis is that “Trust” and “CheaperPrice” aren’t independent. Our significance level is set at 0,05.

```
##Chi squared test of Idependence

#Making the vectors
VerySafe= c(33,16)
Safe= c(38,28)
NotSoSafe= c(6,3)
NotSafeAtAll= c(0,5)
Indifferent= c(2,3)

#Putting the row vectors together in order to make matrices,
#and converting the matrix into a data frame.
Trust.CheaperPrice = as.data.frame(rbind(VerySafe, Safe, NotSoSafe, NotSafeAtAll, Indifferent))

#Giving the columns names within the data frame
names(Trust.CheaperPrice) = c('1', '0')

chisq.test(Trust.CheaperPrice)

      Pearson's Chi-squared test

data:  Trust.CheaperPrice
X-squared = 9.6233, df = 4, p-value = 0.04727
```

From the test we see, that we get a p – value of 0,04727. This means that the p –value is lower than the significance level 0,05. This further means, that we are not going to accept the null hypothesis, and that we see that there is a statistically significant relationship between the two variables. This means that cheaper prices, as a factor, is related to customers’ trust, when they buy beauty products online.

So, from all the statistical tests of this question we see, that the only significant result we get is between “Trust” and “CheaperPrice”, so good prices as a service quality parameter, makes the consumers trust the online beauty provider more.

5.8 H5:

A higher level of service quality increases customer loyalty.

When testing whether this hypothesis can be verified, we are going to use question 24 and question 25. Question 24 is as follows: “When you buy beauty products online, do you stick to just one website, or do you use several websites?”. This question has 2 possible answers, which means that it is a binary categorical variable. As in the last hypothesis “A higher level of service quality increases a customer’s trust”, the answers to question 25 are each going to be treated like dummy

variables and tested against question 24. Question 24 will have the name “Loyalty” when treated like a categorical variable.

Contingency table and Chi squared test of independence for “Loyalty” against “ProductRange”:

		ProductRange		
		1	0	Total
Loyalty	One website	15	11	26
	Several websites	78	30	108
	Total	93	41	134

Table 22

##Chi squared test of Idependence

#Making the vectors

OneWebsite= c(15,11)

SeveralWebsites= c(78,30)

#Putting the row vectors together in order to make matrices,

#and converting the matrix into a data frame.

Loyalty.ProductRange = as.data.frame(rbind(OneWebsite,SeveralWebsites))

#Giving the columns names within the data frame

names(Loyalty.ProductRange) = c('1','0')

chisq.test(Loyalty.ProductRange)

Pearson's Chi-squared test with Yates' continuity correction

data: Loyalty.ProductRange

X-squared = 1.4553, df = 1, p-value = 0.2277

Contingency table and Chi squared test of independence for “Loyalty” against “CustomerService”.

		CustomerService		
		1	0	Total
Loyalty	One website	11	15	26
	Several websites	40	68	108
	Total	51	83	134

Table 23

```
##Chi squared test of Idependence

#Making the vectors
OneWebsite= c(11,15)
SeveralWebsites= c(40,68)

#Putting the row vectors together in order to make matrices,
#and converting the matrix into a data frame.
Loyalty.CustomerService = as.data.frame(rbind(OneWebsite,SeveralWebsites))

#Giving the columns names within the data frame
names(Loyalty.CustomerService) = c('1','0')

chisq.test(Loyalty.CustomerService)
```

Pearson's Chi-squared test with Yates' continuity correction

```
data: Loyalty.CustomerService
X-squared = 0.073966, df = 1, p-value = 0.7856
```

Contingency table and Chi squared test of independence for “Loyalty” against “Delivery”.

		Delivery		
		1	0	Total
Loyalty	One website	14	12	26
	Several websites	67	41	108
	Total	81	53	134

Table 24

```
##Chi squared test of Idependence
```

```
#Making the vectors
OneWebsite= c(14,12)
SeveralWebsites= c(67,41)

#Putting the row vectors together in order to make matrices,
#and converting the matrix into a data frame.
Loyalty.Delivery = as.data.frame(rbind(OneWebsite,SeveralWebsites))

#Giving the columns names within the data frame
names(Loyalty.Delivery) = c('1','0')

chisq.test(Loyalty.Delivery)
```

Pearson's Chi-squared test with Yates' continuity correction

data: Loyalty.Delivery

X-squared = 0.29534, df = 1, p-value = 0.5868

Contingency table and Chi squared test of independence for “Loyalty” against “website”.

		Website		
		1	0	Total
Loyalty	One website	12	14	26
	Several websites	43	65	108
	Total	55	79	134

Table 25

```
##Chi squared test of Independence
```

```
#Making the vectors
```

```
OneWebsite= c(12,14)
```

```
SeveralWebsites= c(43,65)
```

```
#Putting the row vectors together in order to make matrices,  
#and converting the matrix into a data frame.
```

```
Loyalty.Website = as.data.frame(rbind(OneWebsite,SeveralWebsites))
```

```
#Giving the columns names within the data frame
```

```
names(Loyalty.Website) = c('1','0')
```

```
chisq.test(Loyalty.Website)
```

Pearson's Chi-squared test with Yates' continuity correction

data: Loyalty.Website

X-squared = 0.13532, df = 1, p-value = 0.713

Contingency table and Chi squared test of independence for “Loyalty” against “CheaperPrice”.

		CheaperPrice		
		1	0	Total
Loyalty	One website	15	11	26
	Several websites	64	44	108
	Total	79	55	134

Table 26

```
##Chi squared test of Idependence

#Making the vectors
OneWebsite= c(15,11)
SeveralWebsites= c(64,44)

#Putting the row vectors together in order to make matrices,
#and converting the matrix into a data frame.
Loyalty.CheaperPrice = as.data.frame(rbind(OneWebsite,SeveralWebsites))

#Giving the columns names within the data frame
names(Loyalty.CheaperPrice) = c('1','0')

chisq.test(Loyalty.CheaperPrice)
```

Pearson's Chi-squared test with Yates' continuity correction

```
data: Loyalty.CheaperPrice
X-squared = 5.0154e-31, df = 1, p-value = 1
```

As we see from the result of the tests, every single p – value is above the significance level of 0,05. This means, that we accept the null hypothesis to each tests, and conclude, that every tested dummy variable is independent from the categorical variable “Loyalty”. With other words, there is no significant relationship between the variables, and the service quality factors do not make customers more or less loyal to one website over the other.

Further analyzing data.

In this part we are going to further analyze the data. We do that to see what other kind of information we are able to extract from the data provided by the survey.

Service quality factors.

In order to see what kind of information we can extract in accordance to the service quality factors, we are going to look at question 25, which is “What 3 factors are most important to you, according to the website, when you buy beauty products online?”. A histogram will be made in order for us to see which factors, that are the most important ones according to the respondents.

<i>Bin</i>	<i>Service quality factors</i>
ProductRange	93
CustomerService	51
Delivery	81
Website	55
CheaperPrice	79

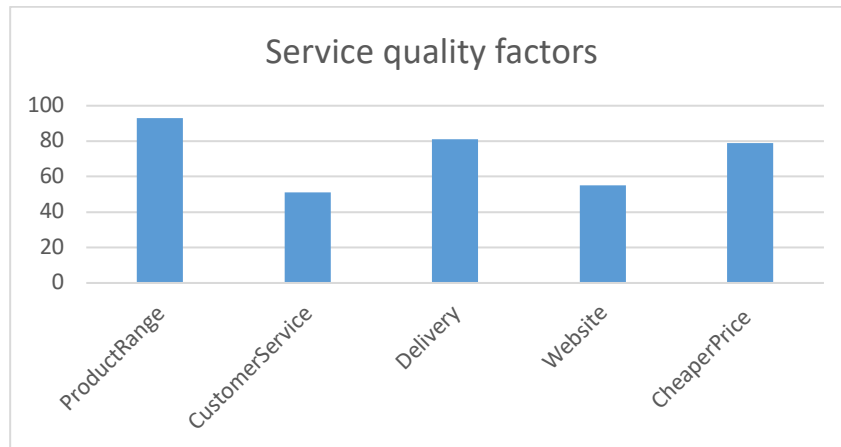
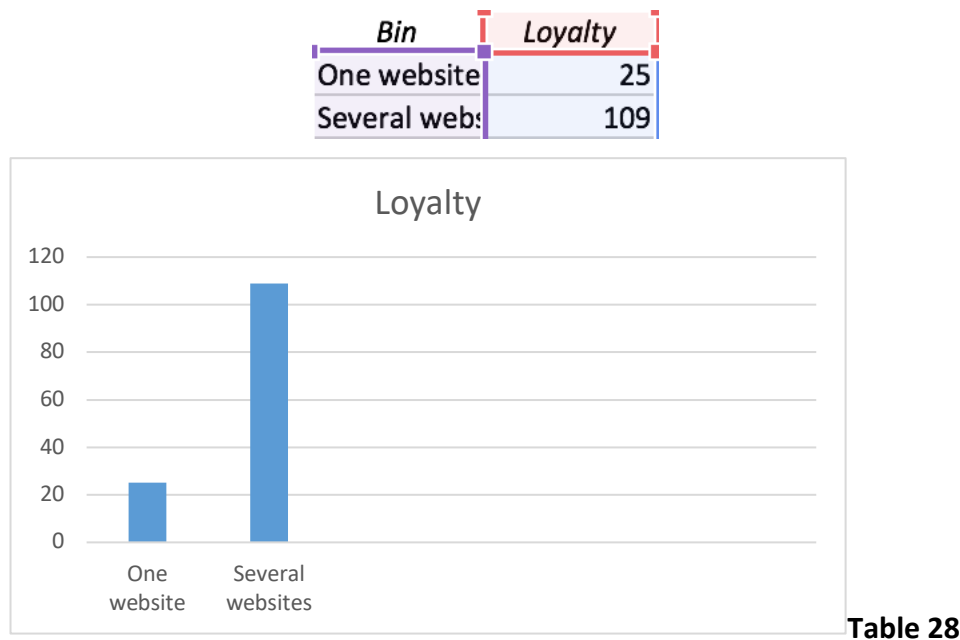


Table 27

As we see from the histogram the most important factor for the respondents is "ProuctRange", so they value a wide array of products being available when they buy beauty products online. Second we have the factor "Delivery", which 81 of the respondents saw as an important factor. So they value fast delivery and having to wait for too long to be an important factor. On a third place we have the factor "CheaperPrice", so the respondents value, that the price is better when they shop for beauty products online opposed to when they buy them in physical stores.

Loyalty

For us to be able to see what kind of information that can be extracted in accordance to loyalty we are going to make a histogram of the results stemming from question 24.



We do from the histogram see a skewed result, which means that the majority of the respondent weren't loyal to one single websites, but preferred to use several websites when buying beauty products online.

Social media

To see whether some social media platforms influence more than others, we will test how influenced by social media, in their beauty purchases, the respondents are compared to what social media platform they use the most.

Since its two categorical variables, we are going to perform a Chi squared test of independence to see if there is any relationship between the two variables. The variables come from question 18 and 19, and the questions are as follows: "From which social media platform, do you get most inspiration from, when you purchase beauty products online?" and "How often do Social Media

influence your purchases of beauty products?”. We further have that the categorical variables are named “Influence” and “SocialM”, and within “SocialM” the different kinds of social media are denoted as follows:

F = Facebook

I = Instagram

Y = Youtube

O = Other

S = Snapchat

B = Beautyblogger

We will firstly take a look at the contingency table.

		SocialM						
		F	I	Y	O	S	B	Total
	Always	5	4	0	0	0	1	10
Influence	Very often	1	13	9	0	1	1	25
	Often	7	25	17	0	0	4	53
	Almost never	8	21	8	0	0	1	38
	Never	2	1	0	3	0	0	6
	Total	23	64	34	3	1	7	132

Table 29

We see here, that overall the social media platform that the respondents mostly get their inspiration from comes from Instagram, with a percentage of $64/132 = 0,48 = 48\%$.

We will now take a look at link between “Influence” and “SocialM”.

The null hypothesis is, that “Influence” and “SocialM” are independent. The alternative hypothesis is, that “Influence” and “SocialM” are not independent, and the significance level is set at 0,05.

```
##Chi-squared test of independence
```

```
#Making the vectors
```

```
Always = c(5,4,0,0,0,1)
```

```
VeryOften = c(1,13,9,0,1,1)
```

```
Often = c(7,25,17,0,0,4)
```

```
AlmostNever = c(8,21,8,0,0,1)
```

```
Never = c(2,1,0,3,0,0)
```

```
#Putting the row vectors together in order to make matrices,
```

```
#and converting the matrix into a data frame.
```

```
SocialM.Influence = as.data.frame(rbind(Always,VeryOften,Often,AlmostNever,Never))
```

```
#Giving the columns name within the data frame
```

```
names(SocialM.Influence) = c('F','I','Y','O','S','B')
```

```
chisq.test(SocialM.Influence)
```

Pearson's Chi-squared test

data: SocialM.Influence

X-squared = 87.616, df = 20, p-value = 1.93e-10

With a p – value of 0,000000000193 we are going to reject the null hypothesis, since the value is lower than the significance level of 0,05. This also means, that the two variable are dependent on one another. We will explore that further by looking at the calculated percentages.

	F	I	Y	O	S	B
Always	5/23= 0,2173913	4/64= 0,0625	0/34= 0	0/3= 0	0/1= 0	1/7= 0,1428571
Very often	1/23= 0,04347826	13/64= 0,203125	9/34= 0,2647059	0/3= 0	1/1= 1	1/7= 0,1428571
Often	7/23= 0,3043478	25/64= 0,390625	17/34= 0,2058824	0/3= 0	0/1= 0	4/7= 0,5714286
Almost never	8/23= 0,3478261	21/64= 0,328125	8/34= 0,2352941	0/3= 0	0/1= 0	1/7= 0,1428571
Never	2/23= 0,08695652	1/64= 0,015625	0/34= 0	3/3= 1	0/1= 0	0/7= 0

Table 30

				SocialM				
		F	I	Y	O	S	B	
	Always	22%	6%	0%	0%	0%	14%	
Influence	Very often	4,3%	20%	26%	0%	100%	14%	
	Often	30%	39%	20%	0%	0%	57%	
	Almost never	35%	33%	23%	0%	0%	14%	
	Never	9%	1,6%	0%	100%	0%	0%	

Table 31

What we see, is that those saying they get most inspiration from beauty bloggers are often influenced when they buy new beauty products. We further see, that those using Snapchat, are very often influenced. And we further see, that those mostly using Instagram, “often” 39% are influenced, “Very often” 20% are influenced and “Always” are 6 % influenced, which makes a total of 65 % of the respondents that choose Instagram, which was a majority, to be influenced to some degree by Instagram.

Chapter 6 – Discussion

6.1 Discussion:

H1:

When a consumer is influenced by social media, then the consumer is more likely to purchase more beauty products online, than a consumer who isn't influenced.

What the testing to this hypothesis showed, was that there was a dependency relationship between how influenced by social media the respondents were and the amount of beauty products they bought online.

We saw that 45,7% of the consumers who were “often” influenced by social media bought half of their beauty products online and we further saw that 50% of the consumers who were “very often” influenced by social media bought all of their beauty products online. We further saw from the testing, that 33,3 % of the consumers who were “very often” influenced by social media did prefer to shop online opposed to buying their beauty products in a physical store.

The theory under “Social media” is evident here: *“This makes the consumer’s position even more powerful, firstly because, they are able to connect with other costumers on a global level, and express their opinions on different products, service and so on”* **Social Media Theory**. So we see here, that the respondents get influenced through the different reviews and opinions shared on social media into purchasing more beauty products online.

H2:

A consumer who mainly purchases makeup online is a consumer who is highly influenced by social media.

The result from the statistical tests showed that being influenced by social media was independent from what category of beauty products the respondents bought most from. But when we looked at the percentages we saw that 43% of the respondents who were “often” influenced by social media were the ones who mostly bought makeup when they purchased beauty products online. This relates to the **Social Media Theory**, where we have that consumer’s can connect with each other on a global level and review different beauty products online. Which means, that they have the ability to influence each other through different social media platforms and encourage each other to buy different beauty products.

H3:

Service quality in terms of customer service is most important to the customers who do not purchase that many beauty products online.

The result to this hypothesis was, that there was no relationship between how many beauty products the respondents buy online and how much they make use of customer service. That lack of dependency between the two variables made further sense when we looked at the histogram (Table 16), where we saw, that 94% only made use of customer service in case something was wrong with their purchase. The **Social Media Theory** states, that when a company builds trust with a customer, then it becomes beneficial for the company because of the trust factor. Therefore, according to the theory there should be a differentiation in who wanted to use customer service, the costumers who are used to buy online and the ones who aren't as used to buy products online, since the ones buying lots of beauty products should have established a higher degree of trust than the ones who isn't as used to buying online. This means that according to the theory the customers who do not purchase as much should not trust the companies as much as the customers who buy often. But as we saw the result coming from the statistical test showed otherwise.

H4:

A higher level of service quality increases a customer's trust.

When we look at the results that were provided by the statistical test, we, see that "Trust" and "CheaperPrice" were dependent on each other. This means that as a service quality factor the respondents associated cheaper prices online, as being a trustworthy factor. We do also further see in our histogram (**nummer**), that "Cheaperprice" is the third most important factor. When we take a look at the **Service Quality Gap model**, we have the gap called **The Understanding Gap**, which is a gap that exists if the company lack understanding in what their customers desire. In this case we see, that the customers do seek cheaper prices when they buy beauty products online, we do therefore have an example where there is no gap in understanding the customer. We further have the theory connected to **Social media**, where we have, that when a company works towards

understanding their customers, they build trust. All this makes the customer trust the company and trust using their credit card when buying beauty products.

H5:

A higher level of service quality increases customer loyalty.

When looking at the results from the statistical testing for this hypothesis, we saw that there wasn't a significant relationship between the service quality factors and being loyal to one website over the other. This indicates that the respondents didn't feel the necessary attachment to one specific online provider of beauty products over the other. That was further confirmed, when we looked at the histogram (Table 28), where we saw, that 109 of the respondents used several websites to purchase their beauty products, which is a percentage of $109/134 = 0,81 = 81\%$. The lack of customer loyalty in this case can be referred back to the service quality gap model. Here we saw the importance of understanding the customer, so that the company is able to provide the customer with the product and service they demand, which was crucial in order for the company to avoid customer decay. When we take a look at the other histogram (Table 27), we see, that the three most important quality factors were "ProductRange", "Delivery" and "CheaperPrice". What we see here is an example of **The Understanding Gap**. It is evident, that the needs of the respondents that were asked in this survey weren't particularly well understood by the different online providers, since the majority weren't loyal to a single provider.

6.2 Critique of approach

In this section, we are going to discuss the overall reliability of the data and how well it can answer the problem statement.

The first thing, which is worth discussing, is the option of answers available to the respondent when looking at customer satisfaction. If the answers were designed in a different way, then different statistical methods could be used and thereby different results could occur.

Another way of making the survey could have been through the approach of Structural equation modeling¹⁷, which is a part of the multivariate factor analysis. For that to be an option, the

¹⁷ Johnson R, Wichern Dean – Applied multivariate statistical analysis (2014)p. 481)

answers had to be measured on a scale level. An example of that is by letting the respondent chose a number from 1-10, so a rating in how much they agree with a certain question. With that method we would be able to calculate the correlation between variables, and eventually looking for underlying factors describing the data.

Lastly we have that the age group of the respondents within the survey are maximum 45 years old. There are 13 respondents in the group of 37-45, and due to the fact that we did not have another age group over 45, we can either assume that the specific age group over 45 did not answer, even though they had access to the survey, or we can assume that some of the respondents within this age group 37-45 are actually above 45.

Chapter 7 - Conclusion

7.1 Conclusion

Online shopping has become a very popular way of purchasing beauty products.

With the web 2.0 the opportunity for consumers and companies to interact with each other became much easier. Sharing reviews on different social media platforms influenced consumers in their choice of buying beauty products.

The aim of this thesis was to explore the factors that influence a consumer when they shop beauty products online and further what factors that are important for a customer in order to be satisfied and increasing their loyalty towards a brand.

Through relevant literature, theories were found and those stated, that there is a linear relationship between customer satisfaction and loyalty. The more satisfied a customer is the more loyal he/she becomes towards a brand or a product.

The findings from our tests showed, that there was dependent relationship between how influenced by social media the respondents were and how many beauty products they bought online. At the same time, we found that being influenced by social media didn't have an influence on which category the respondents bought most from. We also saw, that the use of customer service wasn't influenced by how often the respondents bought their beauty products online.

From hypothesis 4 we found that was a relationship between a customer's trust and their preferred service quality factor, which was cheaper prices. And the last hypothesis showed us, that respondents must have felt a lack of attachment towards an online provider since, there wasn't a relationship between the service quality factors and how loyal the customers were.

But we found that a factor that influenced a consumer when they shopped online was indeed social media, but there was no specific service quality factor, that had an impact on their loyalty towards a brand or a product.

Lastly our critique suggested, that if different answers to the question were provided, different results might occur, or different statistical tests might have yielded different results on the hypothesizes.

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Appendix 1

Euromonitor Article October 2017



2017 DIGITAL CONSUMER INDEX: PINPOINTING THE MOST PROMISING DIGITAL OPPORTUNITIES

October 2017

INTRODUCTION

Key findings

Connectivity gives way to the Connected Consumer	Digital connectivity has altered all of life. Consumers leverage it for purposes such as entertainment, education, knowledge, social sharing and shopping. This connectivity has disrupted - and arguably improved upon - many structures for engaging in such activities.
Mobile phone fuelled the digital democratisation of society	While there is no disputing how this device transformed life for developed market consumers, it served an even more pivotal role for emerging market consumers. The cheaper handsets and less costly mobile networks put internet access into the hands of emerging market consumers, thus democratising internet access for more of the global population.
South Korea sits atop current digital connectivity rankings	South Korea is a leader in technological development and implementation, with some of the fastest and most extensive networks in the world. The strength of these digital connections has propelled it to the top spot in the Digital Connectivity Index current rankings. While South Korea is strong in both fixed and mobile connectivity, it is the strength of its home connectivity propelling it to the top.
Australia leads in Digital Consumer Index as consumers embrace digital mindset	High levels of technological investment and consumer adoption of such tools for digital commerce, propelled Australia to the top spot in the Digital Consumer Index based on current scores. In a quest for ultimate convenience, these consumers are actively shifting digital purchases from the computer to the on-the-go mobile device.
UAE and China continue to outpace emerging market counterparts	The United Arab Emirates and China are outpacing their emerging market counterparts based on the Digital Consumer Index based on current scores. The former is the highest ranked emerging market, coming in at number 15 based on current rankings. China, however, is projected to make one of the greatest leaps over the forecast period.

Appendix 2

Internet Penetration Rates in Europe (*Pantono E, Nguyen B, Dennis C, Merrilees B, Gerlach S (2017) – Internet Retailing and future perspectives. Second edition. Routhledge*)

■ **Table 1.1** Internet penetration rates in Europe

Country	Internet penetration %
Norway	97
Netherlands	93
Sweden	93
Denmark	90
Finland	89
UK	84

■ 2

THE WORLD OF E-RETAIL

Germany	83
Switzerland	82
Belgium	81
Austria	80
France	80
Slovakia	79
Estonia	78
Ireland	77
Czech Republic	73
Latvia	72
Slovenia	72
Croatia	71
Israel	70
Spain	67
Hungary	65
Lithuania	65
Poland	65
Italy	58
Serbia	56
Portugal	55
Greece	53
Bulgaria	51
Russia	48
Turkey	46
Romania	44
Ukraine	34

Source: Adapted from Nielsen (2014)

Appendix 3

European online retail sales 2014 and 2015 (*Pantono E, Nguyen B, Dennis C, Merrilees B, Gerlach S (2017) – Internet Retailing and future perspectives. Second edition. Routhledge*)

Table 1.2 European online retail sales 2014 and 2015

	2014 Online retail sales £	2014 Growth %	2015 Online retail sales £	2015 Growth %	2015 Online retail sales €
UK	45.0	15.8	52.3	16.2	61.8
Germany	36.2	25.0	44.6	23.1	52.8
France	26.4	16.5	30.9	17.0	36.5
Spain	6.9	19.6	8.2	18.6	9.6
Italy	5.3	19.0	6.4	19.0	7.5
Netherlands	5.1	13.5	5.9	16.8	7.0
Sweden	3.6	15.5	4.2	15.5	4.9
Poland	3.6	22.6	4.3	21.0	5.1
Europe	132.1	18.4	156.7	18.4	185.4

Source: Adapted from Centre of Retail Research (2013)

Appendix 4

Survey

Info:

1. *Gender:* woman man

2. *Age:* 18-25 26-30 31-36 37-45

3. *Status:* single married cohabiting

4. *Do you have any children:* yes – no

5. *What is your current occupational status?*

Student – job seeking – self employed – employee – other (elaborate)

6. *Have you ever bought beauty online?* Yes – no

7. *Within this latest month, how many times have you purchased beauty products online?*

- 1-2 times, 3-4, more than 4 times

8. *How many of your beauty products do you purchase online?*

All – half – under half

9. *What is your preferred way of shopping beauty products?*

Online – in stores – both online and in stores

Budget:

10. *What is your annual income?*

- 0-49.999 kr. 50.000-99.999 100.000-149.999 150.000-199.999
200.000kr. – 249.999kr. 250.000kr. – 299.999 kr. 300.000kr. - 3
49.999kr. 350.000kr. 399.999kr. 400.000kr. – 449.999 kr. 450.000kr. –
500.000 kr.

11. *How much money do you spend, on average, on beauty products pr. month?*

0-299 kr. 300-599 kr. 600-899 kr. 900-1299 kr. 1300-1599 kr.
1600-1899 kr. 1900kr +

12. *How much of this amount do you approx. spend on average on beauty products solely bought online?*

approx. $\frac{1}{4}$ approx. $\frac{1}{2}$ more than $\frac{1}{2}$ all purchases
do not know(elaborate)

13. When you purchase beauty products online, from which category do you buy the most from?
Hair products – skin care- makeup

How much money do you apprix. Spend avrage online pre month on the following categories?v

14. Hair products:	0-99 kr.	100-299 kr.	300-499 kr.	Over 500 kr.
15. Skin care:	0-99 kr.	100-299 kr.	300-499 kr.	Over 500 kr.
16. Makeup:	0-99 kr.	100-299 kr.	300-499 kr.	Over 500 kr.

Social media

17. Do you use social media?

Yes – no

18. From which social media do you get the most inspiration to buy beauty products online?

Facebook Instagram Youtube Snapchat beauty bloggere
other (elaborate)

19. How often do Social Media influence your purchases of beauty products?

Always – very often – often – almost never – never

20. In case social media has an influence on your purchase of beauty products, how often do feel that your requested beauty product is available online?

Always – almost always – not so often – never

21. If the products aren't availabe online, what is most often the reason for that?

They are not availabel online – not in stock – delivery to Denmark is not possible

Safety

22. How safe do you feel, when you shop online (in terms of using you credit card)?

Very safe – safe- not very safe – not safe at all – indifferent

23. How safe do you feel about the beauty products you purchase online to be what they appear to be?

Very safe – safe – not so safe – not safe at all

Loyalty

24. When you purchase beauty products online, are you loyal to one website or do you use several websites?

Only one website – several websites

25. Which 3 factors are most important to you, according to the website, when you buy beauty products online?

A wide range of products – good customer service – fast delivery – good website – cheaper prices

26. Which of the following websites do you use when you purchase beauty online?

Cocopanda.dk - lookfantastic.dk – matas.dk – asos.dk – cultbeauty.co.uk – other (elaborate)

27. *Whats your primary focus when you visit websites about beauty?*

- To seek new trends and inspiration for my next purchase
- It must be easy, fast and smooth
- I know what I am seeking, its therefore less time consuming to shop online than in physical stores
- I often seek good deals
- Non of the above, I only shop in physical stores

Service

28. *How often do you make use of customer service when you purchase beauty products online?*

- I make use of customer service after every purchase to confirm the purchase
- I only make use of customer service, when I am very much in doubt or if there really are serious issues with my purchase.