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Master Thesis

**Customer Buying Behavior of Smartphones**

**A study of the Customer Buying Behavior of Smartphones by Taking the Example of  
Apple iOS and Android Smartphones**

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**Declaration of authorship**

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## **Management Summary**

Customer buying behavior is a field of study of interest to many marketers since the introduction of the marketing concept. Understanding and evaluating why customers buy a specific market offer, was their crucial motivation. Smartphone usage is increasing every day and the competition to sell these devices is very tough. Analyzing and evaluating customers' buying behavior of smartphones is bringing new understandings on what customers nowadays see as important when deciding to buy a smartphone.

In this study, it is of particular interest to approach the customer buying behavior of smartphones. Based on a detailed review of the literature, a conceptual model and a theoretical framework were designed, which visualize the variables and hypotheses. The empirical data collection is based on an online survey questionnaire. The questionnaire consisted of four sections. In the first two sections, customers had to express their pre-purchase behavior, and the two last parts evaluated the post-purchase behavior of customers buying smartphones. The participants were targeted in Switzerland and were invited via email, WhatsApp and Facebook, using the survey link on SurveyMonkey, to fill in the questionnaire. The questions in the survey served to measure each variable of the conceptual model, which included the buying decision of customers, their satisfaction with the product, repurchase intention, and loyalty towards the brand.

The results of the 99 valid participants showed that customers are changing their behavior towards buying smartphones. When purchasing a smartphone, customers refer mostly to their lifestyle and personality, followed by attributes like quality, ease of use, and battery durability. Moreover, in the two smartphones groups, iOS and Android, it was shown that in every aspect, iOS users express a higher degree of loyalty to the brand. This also shows that Apple is still leading in creating a unique brand experience with its customers and constantly persuading them to buy the device. Even though prices are increasing each year, customers still continue to buy the brand, as long as it meets their personal needs.

The results of this study led to possible recommendations for researchers and marketers, in order to focus on matching customers' personal lifestyle and personality. These are crucial elements in order to connect with the customers and creating loyal customers, which is the end goal of every company.

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**List of Abbreviations**

CB	=	Customer Behavior
CBB	=	Customer Buying Behavior
CS	=	Customer Satisfaction
BL	=	Brand Loyalty
WOM	=	Word of Mouth
RI	=	Repurchase Intention
ANOVA	=	Brand Familiarity
BD	=	Buying Decision
H	=	Hypothesis
MANOVA	=	Multivariate Analysis of variance

## 1 Introduction

Mobile phone industry is the fastest-growing sector in the communications industry. Smartphones especially have become part of many people's everyday life, and technologically, it can be said that smartphones are one of the greatest gifts to mankind. However, the greatest shift on the smartphone industry, which changed the way that customers evaluate smartphones, was made by Apple when they introduced their first iPhone in 2007 (Sheth, 2017). Since then, the smartphone industry is booming and developing steadily. By 2021, it is projected that 40 percent of the world's population will own a smartphone. In 2016, only Apple alone sold more than 210 million iPhones worldwide, and with its operating system, it has about 15 percent of the total market share (Holst, 2018). According to Deloitte (2018), 92 percent of adults in Switzerland own smartphones, compared to 91 percent in Europe; and 54 percent of smartphone owners rebought a new device within 18 months.

Customer preferences have changed significantly over the past ten years. In the beginning of the smartphone era, customers selected their smartphones based on price, size, screen, storage, etc. While competition and price increased, companies put a more in-depth focus on the customer experience to keep their needs satisfied, offering more than just a good size and quality (Ask, 2018). In this context, past research was focused to better understand what the main components are that influence customers to buy a smartphone. However, some components such as price, product, and communication have not been evaluated all at once in buying smartphones. Hence, which of these components has the biggest influence on the customer, has not been fully understood yet. Therefore, with smartphones becoming one of the most used products from people, customer buying behavior has changed significantly.

Even though companies want customers to buy their products and increase their profit, when it comes to their end goal, companies are more focused on creating a strong relationship with their customers in order to make them purchase the brand again; thus, create brand loyalty (Can, 2017). Some of the most competing brands have already created a strong relationship with their customers. However, it is unclear how long will the customers tolerate the high prices in this competitive market. Do customers switch to competitors when they offer better

products? Will a price increase change their loyalty to the brand? These are the core questions that this thesis seeks to address.

## **1.1 Problem Definition and Significance of the Research**

Since Apple introduced its first iPhone in 2007, smartphone customers changed their buying behavior, especially in these days when smartphones have become part of people's everyday life. Therefore, this thesis will focus primarily in Apple iPhones and secondly on Android smartphones, to help better understand the differences on customers' buying behavior.

Despite the great success of Apple in the last years, there are a lot of complaints against the prices and performance of these devices overall. The average price of an iPhone in the last years has increased from \$724 to \$793 (Garun, 2018). According to Kelly (2018), the new iPhone X, which was released in 2017, experienced some hardware and software issues. Furthermore, she stated that this information was made available by the official web page of Apple, which shows that Apple is already admitting it. Even though the competition on the smartphone industry is high and customers today have a lot of different options to choose from when buying a smartphone, Apple still has the most satisfied customers in this industry. The American Customer Satisfaction Index released in 2018 showed that Apple iPhone 7 Plus had the highest satisfaction rate among all smartphones (Silver, 2018). Therefore, it is still unknown how Apple can maintain this satisfaction rate with prices increasing every year; which makes Apple products the most expensive ones in the market. Apple are aware of the high prices of their products, but they are not worried, as people are still going to wait in line to get them. Also, how long customers are going to continue to pay these premium prices, is unknown (Smith, 2019). Hence, analyzing customer buying behavior of smartphones will give an answer why customers buy a specific brand; and what is more important, how smartphone providers can retain their customers and create brand loyalty.

Premium brands are associated strongly with brand equity. Customers may pay more for the brands they like because they notice a unique value that no other alternative can provide. This uniqueness becomes stronger when the customer uses the brand. Therefore, premium brands with a high tendency of trust can increase market share and have a crucial impact on customer buying behavior (Chaudhuri & Holbrook, 2001).

Research has been conducted to measure customer satisfaction in products and services and still, there are some unsolved issues regarding the theoretical approach of customer satisfaction. However, research suggests that if the perceived performance of the products and services is in line with customers' expectations, then customers will gain satisfaction and therefore repurchase the product. On the other hand, despite the fact that there are often complaints from customers about products and services, customers still don't switch to competitors. Further research needs to be done to see to which extent customer satisfaction is really important and until when dissatisfied customers will continue to purchase these products and services (Gupta & Stewart, 1996, pp. 249–250).

The end goal of companies is to create loyal customers. Customers go through different levels of loyalty, until they reach the top, where they are considered as committed customers. In this level, customers are highly involved with the brand and take pride on having the brand (Aaker, 1991). However, in the modern world, smartphone customers are constantly changing their purchase behavior. So, evaluating their loyalty in this highly competitive industry will provide new information on customer behavior that leads to brand loyalty.

## **1.2 Research Objectives and Research Questions**

As mentioned before, Apple has the most satisfied customers in the smartphone industry. Because of that, the following objectives are defined:

*The main objective of this research is to see what drives Apple customers to buy Apple products every year and maintain their high satisfaction rate.*

*The second objective is to see if the price of the product plays a role in the future buying decisions of Apple customers.*

*The third objective is to see to what extent the customers will remain loyal towards the brand, with the increase of prices every year.*

Based on the research objectives, the research questions are defined:

**Research question 1:** *What are the main behavioral drivers that influence customers' purchase decision of Apple products?*

**Research question 2:** *What is the relationship between repeated purchases and increased price of the product that leads to brand loyalty?*

**Sub-research question:** *Does increased price and brand ecosystem have an impact on customer satisfaction and customer loyalty?*

### 1.3 Structure of this Paper

This paper contains six parts. This chapter is the **first part** and it provides an introduction and also outlines the research objectives, research questions, and the business and academic relevance of the research topic. The **second part** reviews the literature regarding the customer behavior in two parts: first, the pre-purchase behavior is evaluated and after that the post-purchase behavior of customer is analyzed, in order to identify the research gaps and develop the hypotheses. The **third part** explains the methodology that was utilized in this study, together with the conceptual framework. An online survey questionnaire is conducted in order to get the customer insight about customer buying behavior of smartphones. In the **fourth part**, the empirically collected data of the questionnaire are evaluated using descriptive statistics and tests for the defined hypotheses. The **fifth part** interprets and discusses the data. In this part, the customer behavior of smartphones is shown and the impact of increased price on their relationship with the brand. Furthermore, the validity, reliability, and objectivity of the findings are presented in this part. The **sixth** and last part shows the limitations of this thesis and provides recommendations for further research based on findings.

### 1.4 Domain Limitation

This study will focus only in Switzerland and will focus primarily on the Apple company. The outcome provides information about Apple customers and other competitors of the smartphone industry in Switzerland and does not apply to any other market.

It needs to be considered that in Switzerland, the mean salary of jobholders in 2016 was CHF 6,502, CHF313 higher than in 2014 (Le News, 2018). Therefore, customers may not consider the price of the product when they decide to buy it. Because of that, in this research, customers will not be asked about their income. Moreover, the relationship between income and buying behavior is not going to be measured.

Furthermore, this study will not include the origin of the products and cultural aspect which may have an impact on the buying behavior of the customers.

## **2 Literature Review**

This chapter reviews the literature for customer buying behavior in relationship with customer satisfaction, repurchase intention and brand loyalty. First, the basic customer behavior buyer model from Kotler (2002) is used and is adapted for the aim of this thesis (Figure 1). The marketing stimuli and customer characteristics are evaluated as the main drivers for the customer buying decision. After that, the post customer behavior is analyzed, which consists of customer satisfaction, repeated purchases and brand loyalty. These elements are defined and related to the previous model to construct the theoretical framework for this thesis. After having reviewed the literature, the hypotheses for this thesis will be developed. Furthermore, the research gaps from the literature will be shown and will be answered with the above-mentioned research questions.

### **2.1 Customer Behavior**

Customer behavior (CB) dated a long time ago, together with the marketing concept. CB suggests that, in order for companies to have success and profit, they should understand the needs of their customers and stay close to them. Moreover, companies should provide products and services that customers are more likely to purchase. Another major shift in the concept of CB is the increase of importance in the quality of the customer and marketing research. The new technology today offers companies opportunities to see where their customers are and how they can interact more closely with them (Peter & Olson, 2010, p. 4).

CB is a multidimensional and complex process. The decisions of customers are heavily influenced by different factors such as demographics, lifestyle and cultural values. Moreover, their decisions are also influenced by situation and product category. Thus, more marketing research is needed to evaluate the behavior of customers and how they purchase a certain product (Hawkins & Mothersbaugh, 2016, pp. 6–7).

There are several definitions of the concept of CB; however, they are all connected to understanding the needs of the customer. According to Solomon (2017, p. 28) CB is "... the study of the processes involved when individuals or groups select, purchase, use, or dispose of product, services, ideas, or experiences to satisfy needs and desires." These needs and



desires vary for different customers and can range from hunger and thirst, to status and spiritual fulfillment.

In order to see why a customer chose a certain product and what drives the customer to purchase it, a lot of characteristics and factors are evaluated. To better explain this process, the model of CB from Kotler (2002) is used and adapted for the aim of this thesis (Figure 1). First, the impact of the marketing stimuli is described by evaluating each factor that may have an impact on the CB. Marketing stimuli consist of product, price, distribution and communication. Those elements are analyzed on the basis of the impact they have on the customer buying decision (BD). The other stimuli presented in the model is not further analyzed, as the customers in this research are from the same environment and the goal of this thesis is not to determine the impact of the environment in their buying behavior. After that, the customer characteristics, also known as customers 'black box', are analyzed (Kotler, 2002). For the aim of this thesis, the customer characteristics are looked in two perspectives: social and personal. The cultural dimension is not reviewed, as this research only focuses on Switzerland and does not look for cultural differences. Furthermore, the psychological process is not looked into in depth as in the research, as the product is already visible, and customers already have a product to base their buying decision on. After having analyzed the pre-customer behavior, customer post purchase behavior is added to the model with the focus on customer satisfaction, repurchase intention, and brand loyalty (Figure 13).

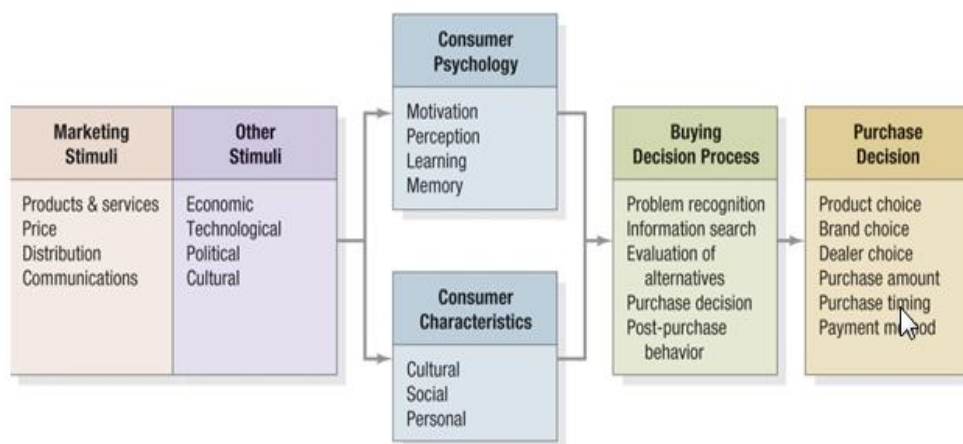


Figure 1. Customer behavior model (Kotler, 2002, p. 88).

## 2.2 Marketing Stimuli

The process of the CBB starts with a stimulus that triggers the customer. As the model shows, marketing stimuli trigger the first action in the buyer consciousness. These factors are also known as the 4P's of marketing, which are: products & services, price, distribution, and communication (Kotler, 2002, p. 88). The marketing mix is an important tool to help better understand what the product and services can offer and also to execute a successful marketing strategy. Marketing mix can satisfy both, the customer and the seller (Martin, 2014). However, the marketing mix will vary based on the customers' needs. Decisions of the customers are not influenced only by one factor of the marketing mix, but also from combining one with another (Goi, 2009, p. 4). The following figure shows the marketing mix elements.



Figure 2. 4P of marketing mix (Zigu, n.d.)

In the following section, products, price and communication of the marketing stimuli are covered and looked into in detail and related to the smartphone industry and customers' BD. Distribution is not analyzed as a marketing mix element, as customers are not asked about the place of purchase. However, distribution is merged with the communication element: personal selling.

### 2.2.1 Products & Services

According to Kotler & Armstrong (2018, p. 244), product is defined as "... anything that can be offered to a market for attention, acquisition, use or consumption, that might satisfy a want or a need.". Products cover more than just tangible products such as a car or a smartphone. They can also be services, events, places, organizations and a mix of all these together (Kotler & Armstrong, 2018, p. 244). Each product has its attributes which can be different from one another. Some of the most important attributes of a product are product quality, product features, product style & design. All these attributes can have a significant impact on the BD process of the customers. When a customer evaluates a product, attributes which fit most to the customer will influence his or her BD (Slaughter, 2018). Customers can have knowledge of various types of attributes. Therefore, it is the job of the marketer to define which are the most relevant attributes that matter to the customer (Peter & Olson, 2010, pp. 71–72).

A study about CB of smartphones conducted by Singh (2015, p. 603) analyzed six attributes of a smartphone that can influence CBB. The results showed that physical attributes and guarantee of the product were considered the most when purchasing a smartphone. Another theoretical study about the impact of product attributes on customer behavior conducted by Mjeda, Tomisa, & Kurecic (2019, p. 1437) showed that the product attributes have a significant impact on the customer's choice of the brand, as nowadays customers are provided with better information about the product. Moreover, the perception of quality of the product changes over time. This is due to the increase of competition or changing expectations of the customer.

**Product quality:** is a group of characteristics which determine the capability of the product to meet the specification requirements of a customer. The quality of the product differs from another product and should be initially checked during the manufacturing process to make it clear in case of any defect (Satyendra, 2016). However, nowadays, product quality is more concerned about creating value and satisfaction to the customer, as it is shown as an important element that meets their needs and desires. In this case, product quality means performance quality, which refers to the product's ability to perform its functions (Kotler & Armstrong, 2018, p. 249). On the other hand, customers have different opinions on how they define

quality. For some customers, high price or brand image is related to high quality and for other customers, country of origin and the producer defines the quality of the product (Agyekum, Haifeng, & Agyeiwaa, 2015, p. 25). This confusion happens when customers are in the absence of actual experience of the product itself and tend to base their assumptions on external factors (Schiffman & Wisenblit, 2015, p. 139).

In a study conducted by Mohd Puad et al. (2016) about product appearance in Samsung smartphones, it showed that product functionality was considered the most important factor in their purchase decision. Therefore, it can be said that product is one of the most important elements of the marketing mix and the starting point of every marketer.

**Product features:** Products can be offered with different features. A company selects the features that are identified as important for its customers, in order to create valuable devices for them. Marketers should know which are the main features that a customer wants and how long it takes for them to introduce those features. It is important for companies to tell customers how to use the features they have added, in order to prevent “feature fatigue” (Kotler & Keller, 2018, p. 393). When it comes to smartphones, there are some important features that every manufacturer should consider. According to Richter (2019), the most important features for a smartphone to have are battery life, ease of use, storage, durability and camera quality. However, no specific brands were stated in the research. Apple iPhone is still considered the easiest smartphone to use, as it works pretty much the same as in 2007 when it was first introduced (Spoonauer, 2019).

**Product style & design:** Unlike style, which simply describes the appearance of the product, design is more complex and goes deep into the product. Creating a good design means understanding the needs of the customer, as well as the product-use experience (Kotler & Armstrong, 2018, p. 250). Notably, in the past decade, design has been viewed as a strategic aspect to create competitive advantage. Not only the form design, but also the ergonomic design, which means the ease of use of the product, plays an important role in the BD of customers. In a study about automotive brand conducted by Bettencourt (2017), showed that the ergonomic design lead to higher market share. Therefore, companies should not spend time and budget only in the form of the product, but also consider the way customers are going to use it. For example, Apple designers used every tool at their disposal, like carefully

selected colors, finishes and materials to make a unique design that captured the users' imagination and differentiated iPhone from other brands (Dolcourt, 2014).

Research from Dospinescu & Florea (2016, p. 149) measured the impact of design on the customer buying behavior of two major smartphone brands: Apple and Samsung. The results showed that design has a significant impact on CBB. Furthermore, they stated that the design elements that had an impact were rated as following first, the brand, second was shape, third was the size followed by material, color and camera.

**Product Services:** Services have different characteristics, such as service intangibility, which means that services cannot be tasted, seen or felt; service inseparability, which means that services have to go along with the product and not be separated; service variability and service perishability (Kotler & Armstrong, 2018, p. 258). One way for companies to differentiate themselves from the competition even more, is to offer different services and improve their quality. Some of the most important services to a product are maintenance and repair. These programs help customers maintain the purchased products in a good working condition (Kotler & Keller, 2018, p. 395).

For smartphone companies, maintenance services are very important, as smartphone customers tend to visit the store for a problem at least once in a period of 2-3 years. The differentiation is made by Apple and Samsung, which are highly ranked when it comes to after-sales services. For example, Apple tends to replace the phone in case of a big problem rather than repairing it, which ranks Apple even higher on the maintenance services list. Furthermore, companies need to have a lot of maintenance service stores, so the customers don't have to wait for the service (Manik, 2017). A study conducted by Mehdi (2015, p. 36) shows that after-sale service was one of the key elements that influence buying behavior of smartphone users. Hence, companies should always try to improve product services to maintain and satisfy their customers.

As a conclusion, it can be said the products & services have a significant impact on the CBB. Specifically, products' main attributes have a crucial impact on how customers make a brand choice. Furthermore, product attributes have a direct impact on customer satisfaction. As a result, the following hypothesis is developed:

***H1a: Satisfaction with product quality has a positive effect on overall customer satisfaction***

### 2.3.1 Price

For decades, price has been one of the most important factors of the marketing mix that influence buyers' choice. Price is defined as: "... the sum of all the values that customers give up to gain the benefits if having or using a product or service.". It is the only element that, instead of representing costs and expenses, generates value. Successful managers handle price as a strategic tool to create value for the customer (Kotler & Armstrong, 2018, p. 308). In this section, price will be analyzed as part of the marketing mix and related to the BD of the customer.

Customers have different views when it comes to prices. Companies and managers tend to create pricing strategies to meet the needs of the customers. One of those strategies is value pricing. To gain loyalty from their customers, companies in recent years have adopted value pricing. In other words, companies will use a low price for a high-quality offering (Kotler & Keller, 2018, p. 609).

On the other hand, some companies are using the strategy of value-added pricing to differentiate from the competitors. This strategy means that companies add quality, services and value-added features, and then charge customers with higher prices (Kotler & Armstrong, 2018, p. 311).

Figure 3 shows value-based pricing and cost-based pricing. The cost-based pricing means that companies set a price that covers the expenses of the product, plus the marginal profit that the company is targeting. If the company sets the price beyond the value it represents, it results in lower sales. Value-based price is the opposite. First, it is based on customer needs and preferences about the product. After that, the company sets the price to match with the preferences of the customer (Kotler & Armstrong, 2018, p. 309).



Figure 3. Consideration in setting price (Kotler & Armstrong, 2018, p. 309)

For every product that companies develop, they have to set a certain price. Depending on the company's goals and objectives, different pricing strategies are developed. One of the strategies used, especially for the smartphone industry is called 'market-skimming pricing.' Using this strategy, a company sets high prices when they develop a product, and after a certain period of time, the company drops the prices (Blythe, 2005, p. 177). Apple practices a typical example of skimming pricing. After the introduction of iPod photo, the price for it was \$349. While Apple released new versions of iPods, they dropped the prices for the older models. This drop in prices is because Apple prices their product high during the initial release, as customers want the latest innovative models (Dawson, 2019).

Many studies tried to measure the impact of price on the customer BD. In a study conducted by Sata (2013), which measured CBB of mobile phone devices, price was one of their main considerations when deciding to buy their mobile phone. Furthermore, she stated that price should never be overlooked as a factor of CB.

In the customer's perspective, price is linked positively with behavioral intentions, because in the eye of the customer, price establishes a brand's image. Therefore, a high price for a brand represents high quality, while a low price represents low quality (UK, 2018). Customers are willing to pay a premium price for the smartphone if it meets their needs. This is supported by a study conducted by Walia & Singla (2017) about factors that influence BD of cellular phones. It showed that price was one of the key elements that influence BD. Furthermore, she stated that customers would not look at the price when the product offers many features that meet their needs.

In conclusion, customers are heavily influenced on the price that a company sets for their products & services. Customers are more likely to pay more when the product has a higher price, because they link high price with high quality. Therefore, the following hypothesis is developed:

**H1c:** *Price has a significant impact on customers' buying decision*

### **2.2.2 Communication**

Communication is the last element of the marketing mix. After developing the product, setting a price and making the product available for customers, it is important to communicate

the value to the customers. Today's market and the customers are changing because of the digitalization process. Therefore, the customers have better information available and can engage more easily with the product using social media, internet and other online sources (Kotler & Armstrong, 2018, p. 425). In order for marketers to implement their right communication programs, they have to know exactly which communication tool will have the most impact on the CBB (Kotler & Keller, 2018, p. 584). However, customers respond differently to the information they get from the company and the communication tools. For the customers, everything communicated from the company is a process. First, they need to get the information provided by the company about their offering. Second, customers need to analyze and understand its meaning. Finally, with all the analyzed information, the customer has to make the buying decision (Peter & Olson, 2010, p. 412).

Kotler & Armstrong (2018, p. 431) argue that customers have different preferences about market offerings. Therefore, they have to evaluate all the touch points that trigger the mind of the customer and what experience will each stage have on their BD. Figure 5 shows the communication process that the customer goes through when evaluating market offerings. The two most important elements of this process are the sender and the receiver.

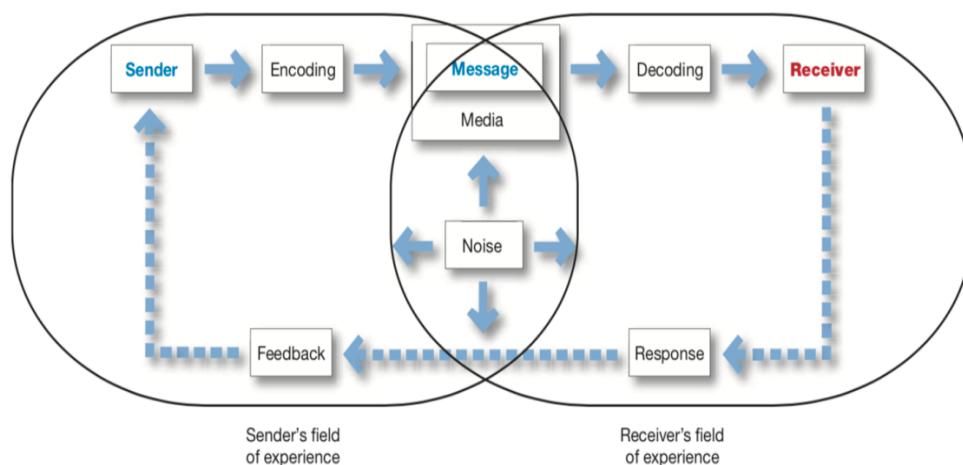


Figure 4. Elements in the communication process (Kotler & Armstrong, 2018, p. 431)

For this process to be efficient, the sender's message should match the receivers' decoding process. Usually, the message is a word or a symbol which later is decoded by the receiver, and then a response is given (Kotler & Keller, 2018).



The communication elements of the marketing mix are very complex and cover many more steps. However, one of the goals of this research is to investigate the promotion tools and their impact on the BD of smartphones. Therefore, the steps of the communication tools are not covered in detail. Hence, the next part includes four of the most important tools of communication. These tools are advertising, public relations, sales promotion and personal selling (Kotler, 2002, p. 278).

Apple has a strong focus on communication mix tools. In order for them to communicate the brand image and premium quality, they focus heavily on different tools of the marketing mix to reach all the touching points that matter for the customers (Greenspan, 2015).

### **2.2.2.1 Advertising**

Keller (2013, p. 221) defines advertising as "... any paid of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor." Furthermore, he stated that even though advertising is a potent tool in the communication mix, it is hard to measure and predict it. A significant advantage of advertising is that it can reach a broad audience as it is seen all over the world. However, big advertising campaigns can be very costly and require a big budget. Therefore, advertising should be carried out carefully and with clear objectives (Fill & Jamieson, 2014, p. 16). Although advertising is very fast and can reach a lot of people quickly, it is very impersonal and many times, it is only a one-way communication with the audience, which sometimes can lower the response rate of the customers (Kotler & Armstrong, 2018, p. 439).

Recently, companies using advertising as their communication tool, try to communicate different messages to their audience. By doing this, companies are choosing all possible channels through which they can reach their customers, from newspapers and magazines to social media. The main targets of the companies through advertising are to encourage sales, differentiate the product from their competitors by showing their benefits, and to make the audience aware when new products are released (Hazelden, 2019).

Another major recent trend in marketing communication tools is digital advertising. For the first time ever, in 2019, digital spending will exceed traditional ad spending and by 2023, digital will surpass two-thirds of the total expenditures in media. Only in 2019, worldwide digital spending will increase by 17.6% (Enberg, 2019). The most recent media types used

for advertising are mobile advertising, print advertising, guerilla advertising, broadcast advertising etc. (Suggett, 2019).

With all these advertising tools, customers have to make a decision depending on the message they received and if the advertising campaign was successful to gain their attention. Different studies have been conducted to measure the impact of advertising on CB. A study conducted by Haider & Shakib (2018) measured the impact of advertising on the CBB. The results showed that customers are more likely to purchase a product when they see an ad somewhere. Furthermore, they stated that customers feel more secure to buy a product when it is introduced in an advertisement. However, this study only measures advertising and no other communication mix tools; therefore, more research is needed to see which element of the communication mix have the most influence on CB.

Another study measuring the impact of advertising on the CB of university students was conducted by Bashir & Malik (2010, p. 9). Their study showed that customers affected by advertising, purchased the product at least once in their life. Furthermore, they stated that the key message and keyword captions in the advertisement influenced the customers.

#### **2.2.2.2 Public Relations**

Public relations (PR) involve a variety of programs designed to uphold or improve a company's image, its products and services portfolio. It is also one of the most effective tools to relate and communicate to the market (Berry & Wilson, 2019). Even though advertising has benefits such as visible, powerful, and hard hitting, PR can validate it in more depth and can provide a better explanation behind the advertising headlines. Therefore, sometimes PR can be used to show what was the message behind the advertisement (Thinktan, 2010). PR involves everyone and everything, and it has to do with the total communications of an organization, whereas advertising is limited more on promoting products and services for buying purposes (Schorah, 2002).

According to Kotler & Keller (2018, p. 629), PR has five main functions, which are press relations, product publicity, corporate communications, lobbying and counseling. Furthermore, they stated that PR has an important role when launching new products, repositioning mature products, influencing specific target groups etc. Companies that use PR, can use different tools when promoting their products and services. Some of them are news,

special events, written materials etc. However, recently some important PR channels that have emerged and proved to have a significant impact on the customer, are social media such as YouTube, Facebook, Instagram, Snapchat, Pinterest and Twitter (Kotler & Armstrong, 2018, p. 472). For example, for Apple, PR plays an important role in their marketing communication strategy. Some of the PR strategies used by Apple are Apple storytelling, simplicity, learn from failure, press releases and culture marketing (Comcowich, 2017a). Furthermore, in the release of the iPhone X, Apple used a new PR strategy in engaging with YouTube bloggers, who were provided with the Apple devices before the official publication. As a result, it made a huge social media influence, as these bloggers have millions of subscribers. By doing so, bloggers could make reviews about Apple's latest device and engage their customers (Comcowich, 2017b).

As mentioned earlier, PR has a significant impact on engaging new customers. Moreover, tools like YouTube, Instagram etc., are seen as the modern tools for public relations. However, no studies have been done yet to measure the impact of these PR tools on the CBB and how much they impact the customers' BD. Therefore, one of the goals of this research is to measure the impact that PR has on CBB.

### **2.2.2.3 Sales Promotion**

According to Kotler (2002, p. 597), sales promotion is defined as "... diverse collection of incentive tools, mostly short term, designed to stimulate quicker or greater purchase of particular products or services by consumers or the trade." Furthermore, he stated that instead of advertising, which offers a reason to buy, sales promotion offers an incentive to buy.

Sales promotion can take various forms, from short-term discounts to large quantities, free pack and gifts. Sales promotion often can be used as 'trade up' which means buying the most expensive version of a product. Sales promotion can be aimed to end consumers but also for distributors, to increase the sales volume of companies (Blythe, 2005, p. 593). According to Jobber & Chadwick (2016, p. 472), sales promotion can be positive when they attract new customers through the promotion – customers that will repurchase the brand later; negative, when the offering is devaluated in the eye of the customer; and neutral, when the customer buys the product only because an incentive was offered.

There are two types of sales promotion. First, consumer sales promotion, which is any sales promotion by which the goal of the promotion is the end consumer. Second, trade sales promotion, in which the promotion activities are focused on dealers, distributors, or agents. Depending on the company's strategy, they may use the strategy that fits their marketing plan (Bhasin, 2018). Customers' sales promotion includes different tools such as samples, coupons, refunds, premiums, etc. On the other hand, trade promotion tools are shelf space, free goods, price-offs and buy-back guarantees (Kotler & Armstrong, 2018, pp. 498–500).

Sales promotion has a significant role in the smartphone industry as well. Recently, the competition in this industry is very high, so companies have to stick to different promotion tools to win and engage with the customers. The most common promotion tactics used by smartphone providers are cashback promotions, gifts with purchase propositions and customer satisfaction guarantees. The benefit of all these tools together can lead to the final goal of the company, which is loyalty from the customers (Gales, 2017). However, when it comes to Apple, they don't usually do discounts of any kind. The discounts are excluded from their stores, as well as from retailers. Even when retailers do discounts on Apple products, they offer free accessories that go with their products. The only way that Apple does discounts, is when they have a new product release. After that, they allow their retailers to lower their prices of older models. Still, it is unknown why Apple is one of the rare companies to do this strategy (Farfan, 2019).

Research has been done to measure the impact of sales promotion in CBB. According to UK (2018), sales promotion has an impact on CBB. Customers are going to buy more products as they may need the product in the future. Furthermore, customers are going to switch brands because of the promotional price. However, it is still unknown if these customers will repeat their purchases in the future. Yet, no specific research has been done to measure the impact of sales promotion when buying an Apple smartphone.

#### **2.2.2.4 Personal Selling**

Unlike advertising, promotion, and other forms of non-personal communication, personal selling is the marketing task that involves face-to-face contact with the customer. Personal selling allows direct interaction between the buyer and the seller. It is the job of the seller to identify the needs and the problems of the customer and provide the customer with sufficient

knowledge (Jobber & Chadwick, 2016, p. 492). Personal selling is a complex process and also involves different types of personal selling for industries, such as territorial sales force structure, product sales force structure and customer sales force structure (Kotler & Armstrong, 2018, p. 483). Since this research is focused on CB, it will cover the customer sales and customer relationship-building and engaging the customer to buy the product. According to Kotler & Armstrong (2018, p. 495), the process of personal selling should have the goal to build and maintain customer relationship. Moreover, they stated that customers go through a buying process before engaging with sellers. Therefore, sellers should understand customers' needs, in order to help them in the buying process. For example, Apple mainly uses personal selling in their stores. The employees are trained to provide information for their product and communicate the product to customers to make them engaged, happy and receptive (Gallo, 2012).

Moreover, Apple uses a unique strategy when selling products in stores. They sell their product directly using Apple Stores. This turned out to be a very successful strategy, as Apple provides their users with the unique experience of having their products all in one place. However, Apple Stores are not their main distribution channels. Apple is very deep into indirect selling, where they make 71 percent of net sales compared to the direct channel (29%) (Cuofano, 2018). In 2018, Apple was operating in 25 countries with a total of 506 retail stores, including the US (Farfan, 2019). Apart from their stores, Apple also authorizes sellers as part of their distribution strategy. They are located in different strategic places, such as in various shopping malls and other places around the world. Some of the sellers include Walmart, Amazon, Verizon, AT&T etc. (Greenspan, 2015).

A research conducted by Briggs (2016) surveyed 2000 UK customers to understand their buying preference of different products. More than half of respondents (53%) said that they would prefer to be in the store to make the final decision. Furthermore, 43 percent of people who prefer in-store experience would like to purchase in-store. Therefore, companies should be prepared for the number of customers shopping in-store, as they are more demanding and have more information available.

Previous research was conducted to measure the impact of personal selling on CBB. Research from Hocking (2013, p. 95) about the effect of personal selling on cookies, showed that

personal selling had a positive influence on CBB and also in relationship-building with customers. Similar results were achieved from Yousif (2016, p. 133) where personal selling had a positive influence on increasing CBB of clothes. However, no studies were found regarding the smartphone industry and the impact of personal selling when buying smartphones.

Each of the communication tools used by a company has a significant impact on CBB. Customers have different preferences and therefore, have different opinions about which of the communication tool has more influence in their BD. However, it can be said that the communication tools have an impact on CBB; therefore, the following hypothesis is developed:

**H1d:** *Communication tools have a positive impact on customers' buying decision.*

### **2.2.3 Marketing stimuli and Buying decision**

As mentioned earlier, marketing stimuli is part of the CB model. The elements of marketing stimuli are also known as 4p's of marketing. Product, price and communication were evaluated and analyzed on the CBB.

First, product and its main attributes are analyzed, and according to previous studies, there is a significant impact of product attributes on the BD of the customer. Especially, product quality is seen to have a major role in the BD of the customer. Furthermore, it was proven that the quality of the product creates value to the customer, which on a later stage leads to customer satisfaction. Moreover, product services are considered to be very important, especially regarding smartphones, as customers value when companies offer maintenance services for them.

Second, price is analyzed as a marketing mix element in creating value for customers. It was shown that price has an impact on the BD. Moreover, customers tend to pay premium prices if the product meets their needs.

Third, direct and indirect distribution channels are analyzed and connected with the customer preferences on choosing the most preferred distribution type. It was shown that customers like to engage in store, when deciding to purchase certain products.

Lastly, the communication mix elements (advertising, PR, sales promotion and personal selling) were analyzed in the smartphone industry, to see the impact they have on CBB. It was proven that communication mix elements have a crucial impact on the CBB.

### 2.3 Customer Characteristics (Black Box)

The second part of the CBB model consists of customer characteristics. Different factors influence customers BD process. Besides the marketing stimuli, customers are also affected by customer characteristics, also known as customers' 'black box', after which the decision-making process is made (Figure 6). These characteristics are cultural, social, personal and psychological (Claessens, 2015). As mentioned earlier, two major characteristics that are covered in this section are *social and personal*.

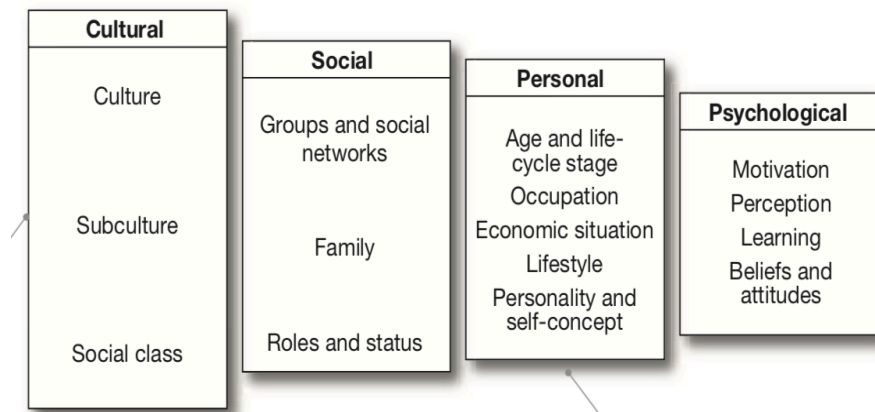


Figure 5. Factors influencing customer behavior (Kotler & Armstrong, 2018, p. 159)

**Social characteristics:** According to Kotler & Armstrong (2018, p. 159), social characteristics that affect CB are groups and social network, family, and roles and status. However, in this research, the respondents are not asked about their status and income. Therefore, only groups, family, and social network are reviewed in the following sections.

**Personal characteristics:** these characteristics are internal and are influenced by the customer's personal beliefs and attitudes. These characteristics include age and lifecycle stage, occupation, economic situation, lifestyle, personality and self-concept (Kotler & Armstrong, 2018, p. 159). However, the goal of this chapter is to see the influence of lifestyle in the CBB.

### **2.3.1 Groups as a Social characteristic**

Humans as social animals need to identify themselves with different groups, which is the primary motivation for an individual's behavior. Humans desire to fit in particular groups where they think they belong (Solomon, 2017, p. 415). There are many definitions about groups. Hawkins & Mothersbaugh (2016, p. 216) define group as "... two or more individuals who share a set of norms, values, or beliefs and have certain implicitly or explicitly defined relationships to one another such that their behaviors are interdependent." Individuals are influenced by different types of social powers, because of their goals and beliefs. Social power is the ability to influence a person in a group to do something, whether that person does it willingly or not. This power can be different for every person and include powers such as referent power, family power, information power, expert (opinion leader) power, etc. (Solomon & Bamossy, 2016, p. 385). In the following section, reference groups, word-of-mouth communication, family and social networks are reviewed and analyzed in CBB.

#### **2.3.1.1 Reference Groups and Buying Decision**

Schiffman & Wisenblit (2015, p. 234) define reference groups as "... groups that serve as sources of comparison, influence, and norms of people's opinions, values, and behaviors." Reference groups can influence members in various ways. First, they expose individuals to new behaviors and lifestyles and second, they can create pressures for conformity that may influence product choices and BD (Kotler & Keller, 2018, p. 221). However, reference groups can also affect the BD negatively. This happens because individuals modify their behavior in that way that the groups think it is correct, even though the groups might have a wrong belief (Solomon, 2017, p. 417). According to Solomon & Bamossy (2016, p. 386), reference groups are more likely to influence BD when it comes to luxury products, because of individual taste and preferences, rather than necessities, which are products that can be purchased by everyone. However, there is another dimension that can influence the BD of individuals. This dimension involves public and private goods. Thus, individual BD varies depending on the type of product they are targeting. Figure 6 below shows the relationship between these two dimensions (Peter & Olson, 2010, pp. 339–340).



	Necessity	Luxury
Public	<p><b>Public necessities</b> Reference group influence Product: Weak Brand: Strong Examples: Wristwatch, automobile, jeans</p>	<p><b>Public luxuries</b> Reference group influence Product: Strong Brand: Strong Examples: Golf clubs, snow skis, sailboat</p>
Private	<p><b>Private necessities</b> Reference group influence Product: Weak Brand: Weak Examples: Mattress, floor lamp, refrigerator</p>	<p><b>Private luxuries</b> Reference group influence Product: Strong Brand: Weak Examples: Plasma TV, trash compactor, ice maker</p>

Figure 6. Effects of Public–Private and Luxury–Necessity Dimensions on Reference Group Influence for Product and Brand Choice (Peter & Olson, 2010, p. 340)

There are different reference groups such as membership groups, formal and informal groups etc. (Hawkins & Mothersbaugh, 2016, p. 217). However, the most important ones for this research are groups that are based on ‘opinion leader’, family & friends, WOM, and social network.

**Opinion leaders:** are people inside a reference group who have special skills, charisma, knowledge and personality, that may have a crucial role on affecting the BD of members in that group (Kotler & Armstrong, 2018, p. 163). Marketers’ goal is to find opinion leaders that have those abilities, to influence and promote their products and to engage more with customers (Kotler & Keller, 2018, p. 221). Customers in the tech industry are heavily influenced by opinion leaders in the BD process. These leaders engage with the customers in different platforms and share their opinions about new products; and because of their knowledge and personality, they influence the customer BD. For example: there is ‘MKBHD’, a YouTube star who makes different reviews for latest tech product, especially smartphones. With millions of viewers, people rely on his opinions when deciding to buy a new smartphone (Anastasia, 2018). Thus, in this research, the opinion leader impact on buying iPhones will be measured in comparison to the effect of family and social network.

### 2.3.1.2 Word-of-Mouth Communication and Buying Decision

Despite all other formal sources of information for customers, there are also informal sources of information that are shared between friends, associates, coworkers, etc. This type of communication is called Word-of-mouth (WOM). It means sharing information regarding products or services from an individual to another (Solomon & Bamossy, 2016, p. 401).

Because it is informal and not pressured through advertising from companies, it is considered more powerful than other formal sources of communications. It has an impact on customer goods and sales up to 50 percent and it is very useful when the customer is not familiar with the product (Solomon, 2017, p. 422). However, negative WOM need to be considered as an important factor that can influence the customers. They stick to the memories of the customers and are spread faster than the positive WOM (Hawkins & Mothersbaugh, 2016, p. 231).

Research has been done to measure the impact that WOM has on the BD of customers. In a study conducted by Sanad (2016, p. 257), measuring WOM impact on the decision process of the youth on smartphones, stated that WOM from friends, family, work colleagues and celebrities affected their BD on a high degree. Other research from Guha (2017), measured the WOM effect for smartphone customers in India. The results showed that three out of four customers consider recommendations from friends and family before buying a smartphone. Hence, this study will focus on the impact of WOM in purchasing a premium smartphone from Apple.

### **2.3.2 Family and Buying Decision**

Marketers have always been interested to know the importance of families in the decision-making process. Usually, a family consists of two or more members, who are linked to blood, adoption or marriage (Peter & Olson, 2010, p. 342). The decision process in families is different from customer decision-making. Sometimes family purchases are affected by emotions and can have an impact on the relationship between family members, especially when prices are considered (Hawkins & Mothersbaugh, 2016, p. 198). Family decision-making is a complex process because many factors, such as income or culture, can affect their choice. Furthermore, different preferences exist between the wife and the husband, or the children and parents in the decision-making process (Schiffman & Wisenblit, 2015, p. 265). Prior research has been made to measure the impact of family on buying different products. As mentioned earlier, in a study conducted by Singh (2015, p. 603) about customer behavior of smartphones, friends and family were rated as the second most important factor that influences CBB. Another study measuring the impact of family on buying household products conducted by Ahamad & Sekhar (2014, p. 26), showed that children's role in buying

decisions is increasing. Furthermore, they stated that females contribute more when it comes to buying washing machines. However, in the end, the husband takes the final decision to buy the product. As a conclusion, the family is shown to have a significant impact on BD. Therefore, this research will show the impact of family in buying a premium smartphone.

### **2.3.3 Social Media Network and Buying Decision**

Over the past years, the online social network has been in the eye of every marketer as it is rapidly increasing. They are online communities where people share information and have opinions on different trends, especially products. Social media communities can take various forms such as Facebook, Twitter, Instagram, Snapchat etc. (Kotler & Armstrong, 2018, p. 163). According to Solomon & Bamossy (2016, p. 420), social media can satisfy customer needs using four high-order goals: connect, create, consume and control. These goals explain why people spend so much time on social media. Moreover, social media has a significant impact on marketing and in customers' product choice. Social media advertising takes nearly 10 percent of all online advertising. Furthermore, two-thirds of customers who are engaged in social media are more likely to recall the brand, feel connected to the brand and purchase the brand (Hawkins & Mothersbaugh, 2016, pp. 222–223).

A study conducted by Reddy (2016, p. 75) about the impact of digital marketing on the decision-making process of Nike brand showed that the ads highly influenced the customers in social media. Customers showed pictures that they took from social media when they went to Nike retail stores and then made the decision to buy. However, Apple uses a unique strategy when it comes to social media. Apple does not use social media to raise awareness or sell their products there; they don't need it. In contrast, they use them to tell how valuable the brand is and to give them the best experience online. When Apple wants to promote a product for selling in social media, they use the phrase: "... buy someone an Apple watch and give them adventure and motivation" (Hessler, 2018). Therefore, this research is focused on what impact social media has on buying iPhones from Apple.

Based on the literature, social customer characteristics have an influence on the CBB. Reference groups, family, and WOM have a direct impact on customers' choice. Therefore, the following hypothesis is developed:

H2a: *“Reference groups, word-of-mouth (WOM) and family have an effect on the buying decisions of customers.”*

### **2.3.4 Personal Characteristic and Buying Decision**

Besides social characteristics, customers are also influenced by personal characteristics. According to Kotler & Armstrong (2018, p. 167), personal characteristics include occupation, age and life stage, economic situation, lifestyle, personality, and self-concept. However, one of the goals of this research is to find how much impact does lifestyle have in CBB. Moreover, the age of the customers is very important as CB will change during a person’s lifecycle (Kotler & Armstrong, 2018, p. 167).

#### **2.3.4.1 Customer Lifestyle and Brand Personality**

In the modern world, customers are free to choose how and in what way they want to spend their time and money, by buying different products and services that define them. This is known as their lifestyle, which is defined as “... the patterns of consumption that reflect a person’s choices of how to spend his or her time and money” (Solomon, 2017, pp. 259–260). Customers have different desires and needs, and their lifestyle has a significant role in their BD and their behavior. Their lifestyle defines many other consumption decisions which enforce the lifestyle (Hawkins & Mothersbaugh, 2016, p. 427). In marketing, lifestyle plays an important role to provide customers with products which fit their lifestyle, and products that the customer can identify with. Furthermore, when customers use different products that are in the same brand family, they like them more because they think they were made to go together (Solomon & Bamossy, 2016, p. 216).

In addition, values have a significant impact on the lifestyle of customers. They go more in-depth than the CB itself and determine customers’ choices in the long term. In that sense, values inside a person can influence the outside of a person’s buying behavior. Figure 7 shows the link between values and lifestyle (Kotler, Keller, Brady, Malcolm, & Hansen, 2016, p. 226)

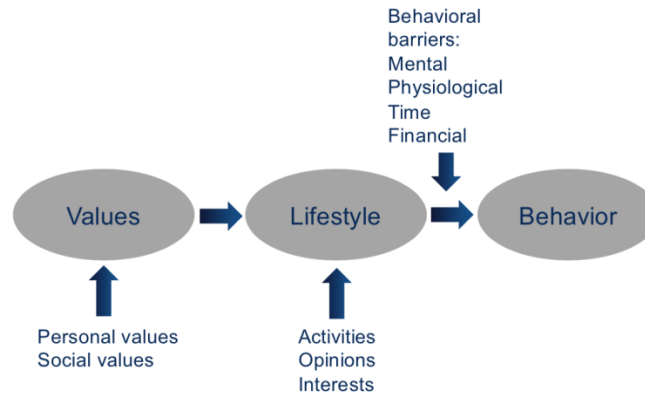


Figure 7. Linking values and lifestyle with behavior (Kotler et al., 2016, p. 226)

Research from Joseph (2012, p. 295) about the impact of lifestyle on buying behavior concluded that people choose the brand or the product, which seems to have a relationship with his or her lifestyle. Furthermore, he stated that customers purchase products and services that define, actualize, or extend their lifestyle identity. However, no studies were found about the impact of lifestyle on buying a smartphone. Therefore, this study will focus on measuring how much impact does lifestyle have in buying a smartphone.

On the other hand, brand personality refers to some unique psychological characteristics that distinguish a person or a group. Just like people who have their own personality, brands also have their own personality. Customers are more likely to choose brands that match their own personality (Kotler & Armstrong, 2018, p. 169). Brand personality can help identify the buying behavior of customers, by combining their expectations with the brand, which are often linked to self-image, and one of the goals that companies want to get more customers (Kotler, 2002, p. 93). Based on a study of the effect of brand personality of purchasing smartphones conducted by Mutinda (2016, p. 108), brand personality has a significant impact on the BD of customers. Furthermore, he stated that companies should incorporate more elements of brand personality in their marketing strategies. Similar results were also shown in the research conducted by Ahmad & Thyagaraj (2015, p. 42) and Vazifehdoost & Hamedanu (2016, p. 26), when they stated that brand personality helps customers build a strong relationship and identify themselves with the brand. Furthermore, they stated that this relationship can have a positive influence on their BD.

In conclusion, both customer lifestyle and brand personality have a positive influence on CBB. Therefore, the following hypothesis is developed:

H2b: *“Personal lifestyle and brand personality have an effect on the buying decision of customers.”*

### **2.3.5 Customers Characteristics and Buying Decision**

Customer characteristics are the second part of the CBB model. These characteristics are also known as the customers' 'black box'. For the aim of this thesis, only the social and personal characteristics are reviewed and analyzed in depth in relationship with the BD of the customers.

In the social characteristics, groups, family and social network are analyzed. As mentioned earlier in the literature review, these characteristics have a significant impact on the buying behavior of customers. Furthermore, personal characteristics are analyzed and based on the literature. Age & lifecycle of the customer, lifestyle and brand personality can have a crucial impact on how customers decide to buy a product or service. Therefore, it can be concluded that both, social and personal characteristics have a positive impact on CBB.

## **2.4 Post-Purchase Customer Behavior**

In the previous chapter, the pre-purchase buying behavior of customers was analyzed. The analysis started by evaluating the marketing stimuli, customer characteristics, and their impact in the BD of customers. In this chapter, the post-purchase behavior of customers and the outcomes of the customers after buying the product are analyzed. According to Kotler & Armstrong (2018, p. 177), after the purchase of the product, the customers will either be satisfied or dissatisfied from the offering. Furthermore, they stated that this evaluation process depends on the expectations of the customer. If the product performance is better than expected, the customer will be satisfied. If the performance is worse, it leads to dissatisfaction. However, there is also another stage, which is called neutral disconfirmation. It means that the performance of the product meets the expectations of the customers (Peter & Olson, 2010, p. 387).

However, post-purchase behavior is more complex and covers more elements. According to Hawkins & Mothersbaugh (2016, p. 622), the post-purchase process includes usage,

evaluation, satisfaction, and after that customers can repurchase, spread positive WOM and build loyalty. This process depends on the customers. Figure 9 shows the post-purchase behavior model of Hawkins & Mothersbaugh (2016, p. 622). According to the model, evaluation can also lead to dissatisfaction, erosion of loyalty and negative WOM. However, effective customer relationship management can help improve satisfaction or deal with dissatisfaction when it happens.

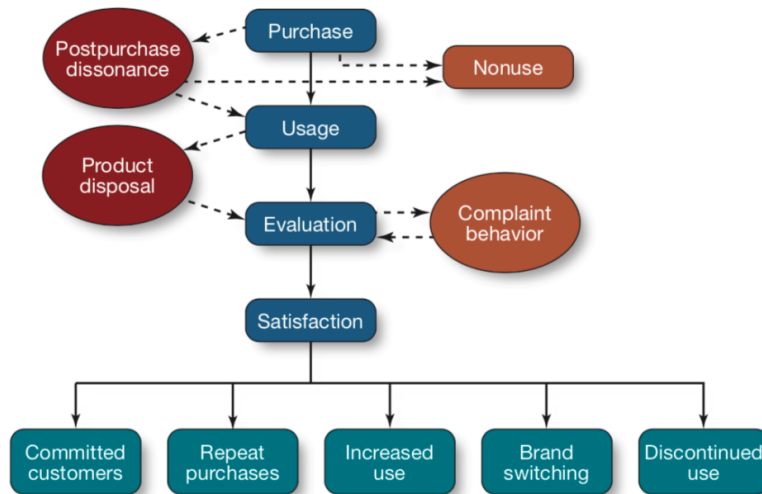


Figure 8. Post-purchase customer behavior (Hawkins & Mothersbaugh, 2016, p. 622)

In the next sections, customer satisfaction, repurchase intentions, and brand loyalty are evaluated. Furthermore, increased price and brand ecosystem will be critically analyzed to see the impact and the relationship between them.

#### 2.4.1 Customer Perceived Value and Satisfaction

One of the main goals of the marketing process is to create value and build a strong relationship with the customer. One of the main concepts of creating value is customer relationship management. CRM is "... the process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction." (Kotler & Armstrong, 2018, p. 38). Whereas, customer satisfaction is defined as "... a person's feeling of pleasure or disappointment that result from comparing a product or service's perceived performance to expectations." (Kotler & Keller, 2018, p. 153).

The process of creating value for customers changed over the past years from a traditional management approach to a more customer-oriented approach. Figure 10 shows the modern

customer-oriented approach, which starts from the customers on top and moves to the top management in the bottom. The modern chart indicates that in every level, companies must be personally involved in knowing and meeting customers' needs (Kotler et al., 2016, p. 380).

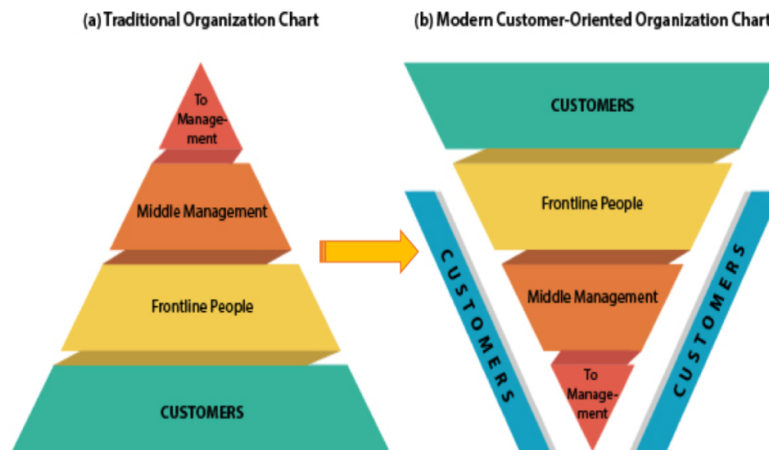


Figure 9. Traditional organization versus Modern customer-oriented organization (Kotler et al., 2016, p. 380)

Whenever customers make brand choices and they want to purchase a particular product, they expect value from it. This value is known as 'customer perceived value' and is defined as "... the difference between prospective customer's evaluation of all the benefits and costs of an offering and the perceived alternatives." (Kotler & Keller, 2018, p. 151). As mentioned earlier, if this value is better than expected, the customer will be satisfied. If the value is worse, the customer will be dissatisfied.

Therefore, it can be said that after the BD of the customers, they will experience satisfaction or dissatisfaction. Since this thesis aims to measure the satisfaction of the customers, the following hypothesis is developed:

H3: *"First-time purchase has a positive effect on customer satisfaction."*

## 2.4.2 Customer Satisfaction and Repurchase Intention

Even though customer satisfaction (CS) was defined in the previous sub-chapter, there are many more definitions of CS as it has been the main subject in many academic and practitioner customer research (Peter & Olson, 2010). Post-purchase behavior is essential for the marketer, as it gives them signal if the product has met the needs of the customer; then,



based on their experience with the product, they may change their future buying behavior. Therefore, marketers know that providing customers with better products will turn positively on the next BD (Solomon & Bamossy, 2016). CS can have an impact on many post-purchase behavior outcomes such as WOM communication, repurchase intention, actual purchases, alternative purchases and complaint behavior. Furthermore, a high level of satisfaction leads to the development of stable relationships with customers and products, which leads them to recommend the brand to others (Rather, Tehseen, Itoo, & Parrey, 2019). Even though keeping customer satisfied and loyal is costly, it can be profitable in the long term (Hanif, Hafeez, & Riaz, 2010, p. 45). Some of the outcomes are shown in Figure 10. However, the relationship between satisfaction and repeated purchases is shown to be very strong (Gupta & Stewart, 1996, pp. 252–253). This connection is also stated by Kotler & Armstrong (2018, p. 39), when they stated that satisfied customers will speak to others about the good experience with the product and will more likely repurchase the same brand again.

Marketers spend much time by trying to increase the percentage of the customers that are satisfied, because they know that there is a big chance that they will repeat their purchases. Furthermore, sometimes, even dissatisfied customers may continue purchasing the same brand, because they are aware of the costs of switching to other competitors (Hawkins & Mothersbaugh, 2016, p. 637).

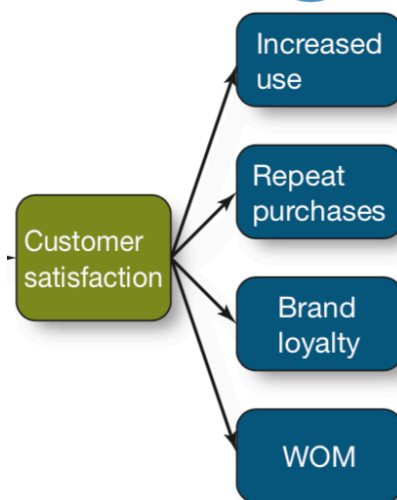


Figure 10. Outcomes of customer satisfaction (Hawkins & Mothersbaugh, 2016, p. 643)

On the other hand, repeated purchases have a significant impact on companies, as they depend on customers who repurchase the brand. Thus, Repurchase Intention (RI) leads to higher revenue and more loyal customers, who also are more likely to pay premium prices to get the product or service. Repurchase intention is the process of people purchasing market offerings from the same firm on more than one occasion (Ibzan, Balarabe, & Jakada, 2016, p. 97). Based on previous research, customers often rely on previous experiences and satisfaction when repurchasing the brand, and also evaluate what competitors offer before making the repurchase (Bindroo, He, & Echambadi, 2016, p. 116). The more satisfied the customer is, the more the chances are that the customer will repurchase the same brand. Customer will purchase the brand again even if there is a small price increase, as they believe that the change of price is due to product or service quality (Hamza V.K, 2014, p. 60). Prior studies have been done in measuring the impact of customer satisfaction in repeated purchases. A study conducted by Kuo, Wu, & Deng (2009, p. 895) measured the relationship between perceived value, CS and RI in mobile value-added services. The results showed that CS directly leads to RI. Furthermore, service quality had no direct relationship in RI without the evaluation of CS. As a result, by offering good services, companies can enhance CS and RI. Similar results were found by Homburg & Giering (2001) in measuring the impact of personal characteristics in CS and brand loyalty. They stated that satisfaction with the product had a significant impact on customers RI. However, the study focused on automobiles, which hold a higher price value than smartphones. Therefore, more research is needed to see the impact of CS on repurchasing smartphones, as very few studies measure the buying behavior of smartphones, especially, the post-purchase behavior. One of the goals of this thesis is to measure the impact of CS on RI. As a result, the following hypothesis is developed:

H4: *“The more satisfied the customer is, the more he/she will repeat the purchase of the product.”*

### **2.4.3 Moderating Effect of Brand Ecosystem on Repurchase Intention**

Unlike the biological ecosystem, which describes interconnections within the natural world, the mobile ecosystem is described as linked devices such as smartphones, tablets, laptops and other devices interacting together using wireless sharing. This ecosystem is changing the behavior of the customers and how people use their smartphones daily. The goal is to provide

a better experience for the customers and to ease their use of the devices (Oreilly, n.d.). The smartphone industry is with no doubt, one of the most growing industries in the world. People use their smartphones every day, and they build a strong connection together. Recently, the new trend for smartphone providers is to keep their customers linked in the brand ecosystem, which provides them interaction between different devices from the same brand. Brands linked within an ecosystem perform better than brands outside the ecosystem with an aware “Brand Intimacy Quotient” of 33.9 percent, which is higher than the average of 29.5 percent (Natarelli, 2017).

One of the leaders of this brand ecosystem is Apple, followed by Samsung and Google. As competition is increasing, it will be challenging for them to make customers repurchase their brands. This is because smartphone prices are increasing and reaching the prices of portable computers. Therefore, customers are thinking carefully when upgrading their devices. However, there is a clear relationship between this ecosystem, which makes customers stick to the brand every year (Ask, 2018).

The brand ecosystem is a new concept. Therefore, there are limited studies and research to see if the brand ecosystem has a significant impact on CBB. However, a case study conducted by Schultz, Zarnekow, & Berlin (2011), included Apple and Google, to see what sort of ecosystem they use to keep their customer satisfied. While Google uses a more “open concept” with different strategic partners, Apple uses a lock-in system or “gated garden” focusing on the user experience, which put Apple in the leading position of many platforms enabling them to create unique relationships with customers using Apple store, TV, etc. Hence, no studies show a clear result, if the interconnected brand ecosystem has an impact on the RI of smartphones. However, as mentioned earlier, there is a strong connection between brand ecosystem and customers. Therefore, the brand ecosystem will moderate the relationship between CS and RI. The goal is to see whether brand ecosystem is one of the main reasons that satisfy the customers. As a result, the following hypothesis is developed:

H4a: *“Brand ecosystem will moderate the effect of customer satisfaction on repeated purchase intention.”*

#### **2.4.4 Repurchase Intention and Brand Loyalty**

In the two previous sub-chapters, post customer behavior is evaluated in terms of satisfaction and brand ecosystem and their impact on RI of customers. This section analyses the relationship between RI and brand loyalty. Furthermore, it is analyzed if customers' repeated purchases will lead to brand loyalty. Brand loyalty is the final target for companies as loyal customers will stay at the company for a long time and will purchase the brand again. Furthermore, they will ignore the competitors and their offerings (Chi, Yeh, & Yang, 2009, pp. 136–137). According to Mukerjee (2018, p. 16), there are many benefits from loyal customers, such as reduced marketing and operational costs for companies. Loyalty also strengthens the relationship of customers with the brand, which is also highly linked with customers purchasing the brand again. Thus, loyalty can be seen as a crucial factor for companies and their profit. There are different definitions of brand loyalty. However, one of the oldest is from Jakoby and Kyner (1971), who see loyalty as a mere repurchase behavior and define it as "... a biased behavioral response expressed over time by a decision making unit with respect to one or more alternative brands out of a set of brands and being a function of psychological processes". According to Bloemer and Casper (1995), it is vital to make the difference between the customers who are not attached to the brand and buy it only because of convenience, and customers who are genuinely loyal to the brand. Such customers who lack attachment to the brand are called spurious customers and they can easily switch brands when an offer occurs.

Brand loyalty is very complex, and in order for research to analyze it, it has been divided into two different sections: behavioral and attitudinal brand loyalty (Schiffman & Wisenblit, 2015, p. 168). According to the behavioral approach, customer loyalty is defined as a behavior. These behaviors include shares of purchase, frequency of purchase, etc., which are based on customer behavior. On the other hand, attitudinal loyalty requires more than just a behavior; it requires an analysis of attitudes and preferences of the customer to evaluate their loyalty (Kabiraj & Shanmugan, 2011, p. 280). However, the goal of this thesis is to determine the behavioral aspect of brand loyalty, even though, according to Dick & Basu (1994), behavioral loyalty does not precisely explain why the customer purchases the brand, instead it only finds out the outcome of the behavior. These two types of loyalty are also called two-dimensional loyalty (Figure 12). In one hand, it is what customers feel, which expresses the

attitudinal loyalty. On the other hand, what customers do refers to behavioral loyalty (Pourian & Bakhsh, 2015, p. 49).



Figure 11. Elements of two-dimensional definition of loyalty (Khan, 2009)

However, according to Dahlgren (2011, p. 81), brand loyalty can have different dimensions and is called multi-dimensional loyalty. All of the dimensions are different and are dependent on customer preferences, attitudes, and behaviors toward the product or service.

As mentioned earlier, the smartphone industry is rapidly increasing, and therefore, different studies are conducted to measure customers' loyalty and RI of smartphones. A recent study conducted by Can (2017, pp. 45–46) measured brand loyalty and repeated purchases of smartphones in Turkey. The results showed that there is a positive relationship between RI and BL. Furthermore, he stated that customers create a habit of buying smartphones, and therefore, they repeat their purchases. Similar results were shown in the study of Hamad (2014) about RI and BL. He stated that the more satisfied the customers are, the more they will repeat their purchases and will build a strong loyalty towards the brand. Another study conducted by Can and Müceldili (2018, p. 26), gives a more holistic view of smartphone buying behavior. They studied the effect of different attributes of smartphones and CBB. Once the customers are familiar with the brand attributes, they did not want to change to competitors and created a strong relationship with the brand. Without a doubt, customers create strong relationships with their smartphones as they use them every day. Based on previous studies, a clear link is seen between RI and BL. Therefore, as one of the main goals of this thesis is to evaluate RI and BL, the following hypothesis is developed:

H4b: *“Repeated purchase intention has a positive impact on brand loyalty.”*

### **2.4.5 Moderating Effect of Increased Price on Brand loyalty**

As mentioned earlier in the sub-section (2.2.2), price has a significant influence on brand choice. Customers are willing to pay premium prices when the quality of the product is higher. Studies from Sata (2013); Walia & Singla (2017), showed that customers are highly influenced by price when they decide to purchase a specific product. However, this section shows the impact of an increased price of the product that may affect customers' loyalty to the brand. Moreover, the increased price will moderate the relationship between RI and BL.

The only element of the marketing mix that is easy to adjust is price. Depending on the actions of the competitors, the company can increase or lower prices. However, customers may react differently, depending on what type of product they are buying. Hence, this will also depend on the relationship which is built between the brand and the customer (Timothy, 2010, pp. 20–21). Companies nowadays want to create a strong bond between customers by providing them smartphones with as many features as possible, to keep them for the future. This is studied by Chen, Chen, & Lin (2016, p. 114) in evaluating factors that influence customers' BD. Besides factors such as quality and design, they also studied the impact of price in their BD. As a result, price was listed as the third main factor in the analysis. Moreover, they stated that customers will still choose the brand, even though its price has increased and is more expensive than competitors. However, customers also stated that they would change the brand. if their experience with the brand after buying it doesn't meet their needs. Some customers tend to switch to other brands when they are experiencing an increase in prices. This is proven by Indrayani, Siringoringo, & Saptariani (2008, p. 23) in their study of the effect of price increase on BL. They stated that a gradual increase in prices made customers switch to other brands. The more the price was increased, the more customers were willing to switch the brand. However, this study was conducted using detergent brands and therefore is not reliable for smartphones, as they have different prices and are in a different category. Thus, it can be concluded that price increase has a significant impact on brand loyalty. Since the sub-research question of this thesis is to find out the impact of increased price on brand loyalty, the following hypothesis is developed:

*H5a: "Increased price will moderate the effect of repeated purchase intention on brand loyalty."*

## 2.5 Research Gaps

As far as the research objectives and research questions are defined, the topics discussed in the literature review are interrelated. Therefore, the topics are taken into consideration in order to identify the research gaps for this thesis.

The literature of customer buying behavior has shown that the most research in this area is concerned with analyzing and understanding the different stages that a customer goes in the whole buying process of a product or service, using the basic model of customer buying behavior and other models (Kotler, 2002; Kotler & Armstrong, 2018; Kotler & Keller, 2018; Blythe, 2005; Peter & Olson, 2010). The marketing stimuli, social characteristics and the psychological part of the customer are some of the main components found in the literature that impact the CBB. All these components were analyzed regarding the smartphone industry and compared in different journals and articles. Nevertheless, in order to answer the research questions for this thesis, the basic model of CB is not enough to measure the post-purchase behavior of the customer. Moreover, research in this area covered every component of the model separately and did not take into account the impact of each element together in one research. Therefore, the literature also covered the post-purchase behavior of customers.

Research from Hawking & Mothersbaugh (2016); Kotler et al. (2016); Solomon & Bamossy (2016), analyzed different points concerning the post-purchase behavior of customers. Based on their research, it can be concluded that customers experience post-purchase behavior such as satisfaction or dissatisfaction. However, the literature does not provide the interconnections between satisfaction, repurchase intention and loyalty with moderators such as increased price and brand ecosystem, which are crucial for understanding the smartphone users and their buying behavior. Various articles and journals (Ibzan, Balarabe, & Jakada, 2016; Bindroo, he, & Echambadi, 2016; Schultz, Zarnekow, & Berlin, 2011; Can, 2017; Chen, & Lin, 2016) measure the connection between CS, RI and BL and evaluate the perception of customers regarding their loyalty. However, to the best knowledge of the author of this thesis, no study which measures the pre and post-purchase behavior of customers with moderating effect of the brand ecosystem and the increased price, has been published yet. Conducting this research would enhance the understanding of the whole customer buying

behavior, starting from the stimuli and ending with loyalty in the smartphone industry which is increasing rapidly and changing the way how customers behave in purchasing them.

## 2.6 Theoretical Framework and Hypothesis

The theoretical framework shown in Figure 13 represents the variables and hypotheses graphically. This framework is used to explain the relationship between the basic CBB model of Kotler (2002) and the post-purchase behavior model of Hawking & Mothersbaugh (2016).

The hypotheses for this thesis are linked to each other. The second part of the framework with CS, RI and BL has two moderating hypotheses, which are brand ecosystem and increased price. These two hypotheses moderate the relationship between CS and RI and the relationship between RI and BL. In the following figure, the framework and hypothesis are shown.

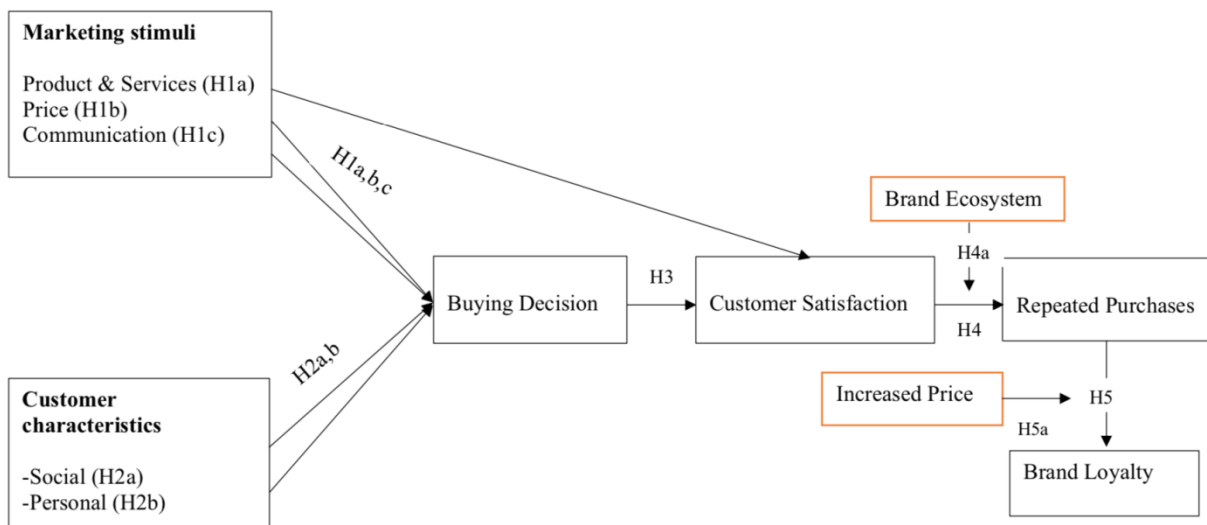


Figure 12. Theoretical framework and hypotheses (own illustration)

**Hypothesis 1a:** Satisfaction with product quality has a positive effect on overall customer satisfaction

**Hypothesis 1b:** Price has a significant impact on customers buying decision

**Hypothesis 1c:** Communication tools have a positive impact on customers buying decision.



**Hypothesis 2a:** *Reference groups, WOM, and family have a positive effect on the buying decisions of customers.*

**Hypothesis 2b:** *Personal lifestyle and personality have a positive effect on the buying decision of customers*

**Hypothesis 3:** *First time purchase has a positive effect on customer satisfaction.*

**Hypothesis 4:** *The more satisfied the customer is, the more likely is he/she to repeat the purchase of the product.*

**Hypothesis 4a:** *Brand ecosystem will moderate the effect of customer satisfaction on repeated purchase intention.*

**Hypothesis 5:** *Repeated purchase intention has a positive impact on brand loyalty.*

**Hypothesis 5a:** *Increased price will moderate the effect of repeated purchase intention on brand loyalty.*

### **3 Methodology**

In order to answer the research question and research objectives (sub-chapter 1.2), both secondary and primary data are being used in this research. The literature review has built a base to identify the customer buying behavior and identify the gaps that are meant to be filled with this research. After that, in order to get the primary data, an online survey questionnaire is conducted. The goal of this thesis is to provide an answer to the questions of what are the main drivers that push customers to buy a smartphone and what is their post-purchase behavior. As the research gaps have shown, it is not possible to reach this goal with additional research. Therefore, an online survey questionnaire will help to get more respondents and to show clearer relationships between customers and brands. In the following part, additional information will be given regarding the methods and operationalization.

#### **3.1 Conceptual framework**

According to Rocco & Plakhotnik (2009, p. 122), the goal of the conceptual framework is to present concepts which are important for the study and create a relationship between them. The following figure shows the conceptual framework for this thesis.

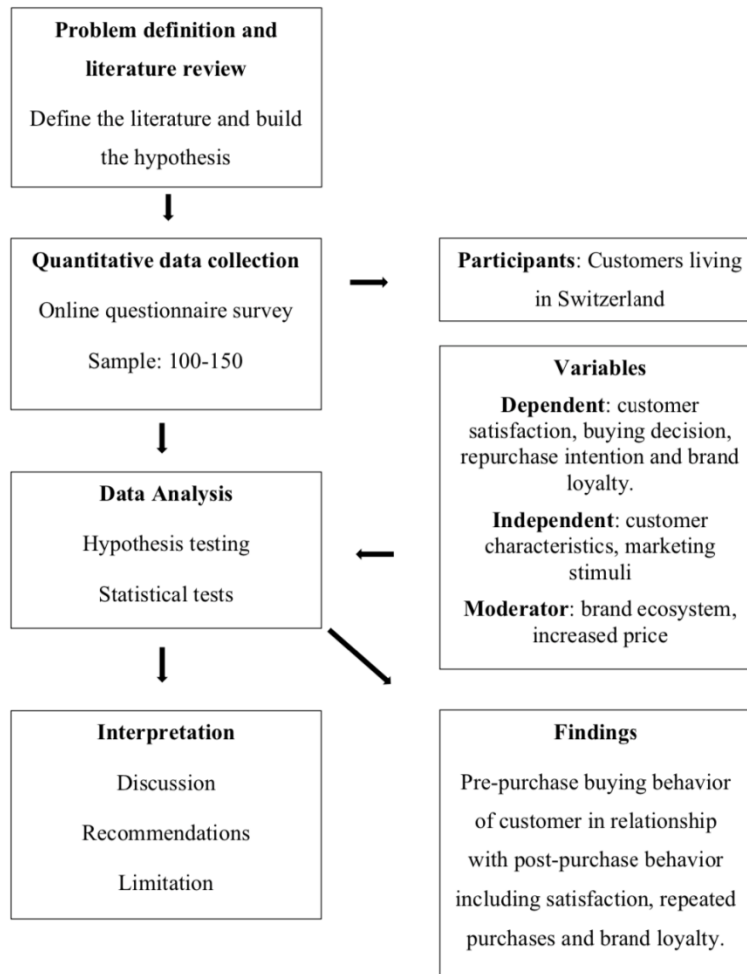


Figure 13. Conceptual framework, own illustration.

### 3.2 Online Survey Questionnaire

The term “survey” most often is used to describe a method of collecting information from a sample of individuals. This “sample” is just a fraction of the population that is being studied (Scheuren, 2014). Therefore, in this study, an online survey questionnaire is used for the data collection. Due to time constraints, the online survey questionnaire will remove location barriers and will be more efficient in saving time for data collection. Furthermore, the survey will help getting more responses, which will give a more reliable set of answers for the research questions and objectives. As this thesis also discusses customer satisfaction, using a questionnaire can provide with better and more reliable results, while using scales to measure their satisfaction (Burton & Steane, 2004).

The survey questions are based on the literature from which the hypotheses are developed and tested in the analysis part. Customers had the opportunity to fill the survey using a smartphone, PC, tablet or laptop. Yet, there could have been some several negative effects, such as lack of responses if the questionnaire takes a long time to complete. The optimal time to get the best results is less than 8-10 minutes, which was also the goal for this questionnaire (Galesic & Bosnjak, 2009). Furthermore, using online questionnaires will not grant the researcher full control whether the respondents will complete the survey. Other disadvantages of using online surveys are the limited sampling, possible cooperation problems and no interviewer for clarification and probing the data (Howard, 2016).

### 3.2.1 Questionnaire Design and Procedure

The questionnaire was designed using the “SurveyMonkey” platform. The questionnaire consists of different question types such as: numbering, listing questions, multiple choice, rating scale and matrix questions, which are further explained in this section. From the beginning of the survey, respondents are asked to choose between Apple brand and another smartphone brand (Samsung, Huawei, etc.). As mentioned in (Chapter 1), Apple has the most satisfied customers in the smartphone industry. Therefore, Apple is the primary focus, which is why the users are split in the survey. More details about why Apple brand is primary chosen are provided in the sub-chapter 1.1.

The questionnaire was divided into 4 main sections and had 20 questions in total. The **first section** asked about demographics of the participant such as age and what type of smartphone brand they are using. After that, they are asked if they are using different product from the same brand, to help the research split the loyal users and the new users from the beginning. Furthermore, price preference is asked before giving them more insight of the survey, so that the respondent does not get biased during completing the survey. The **second section** asked about pre-purchase preferences of the customers. First, product attributes, services and price are asked to see which of these factors has the biggest influence on their BD. After that, marketing activities and social characteristics are asked, to get a clear view of all factors affecting their BD. The **third section** evaluated the customers’ satisfaction after using the product. They were given the opportunity to choose which of the previous-mentioned attributes contributed more to their satisfaction. After that, the post-purchase behavior of the customers is measured by asking them about satisfaction and repurchase

intention. As a moderator, brand ecosystem is included, and the participants are asked to see if it has an impact on their repeated purchases. **Lastly**, the respondents are asked if repeated purchases lead to brand loyalty. As a moderator, increased price will be measured to see if the relationship between repeated purchases and brand loyalty changes. The framework and hypotheses are visualized in sub-chapter 2.6.

### **3.2.2 Pilot Testing**

In order to make sure that the survey was clear and understandable, a pilot-testing phase was conducted with tens participants. First, the survey was sent to the selected participants for completion. The researcher made sure that the participants were not biased before they answered the questionnaire. After that, there was a special button in each of the questions of the survey where the participants of the pilot testing were able to give any comments or feedback about the question. After having collected the responses, some additional corrections were made to the survey to make it more valid and reliable for the respondents which were later asked about the survey. The data that were collected in the pre-study were not used in the analysis, as the questions may not have been clear enough for them; therefore, that may have hindered the hypothesis testing.

### **3.3 Sample**

To collect an appropriate base of datasets for a representative analysis, the sample size is 100-200 participants. However, due to time constraints, only 108 participants answered the survey, which also represents a big limitation to this research. The specific type of sampling that was used to collect the data is snowball sampling. Using snowball sampling will help to generate a high number of results in a short period of time. However, snowball sampling also has some disadvantages such as less control over the sampling method, the representativeness of the sample is not guaranteed and sampling bias (Explorable, 2009). Thus, all types of biases were avoided during this research. The target population are people living in Switzerland, consisting of all age groups, and they were approached online using Facebook, email, and WhatsApp. Also, some respondents were contacted personally from the researcher (friends, family and colleagues), all the while making sure not to be biased with them during the data collection.

### 3.4 Variables and Operationalization

After having reviewed the literature and developed the hypotheses, the research variables were identified. The dependent variables defined for this thesis are customer satisfaction, BD, repurchase intention and brand loyalty. On the other hand, the independent variables are customer characteristics and marketing stimuli. Furthermore, two moderating variables are developed: brand ecosystem and increased price, which are further explained in the operationalization. The following table shows the variables and the operationalization.

<ul style="list-style-type: none"> <li>• Research question/objective: Understand customer buying behavior and post purchase behavior of buying smartphones</li> </ul>				
<ul style="list-style-type: none"> <li>• Type of research: Explanatory by testing relationships and variables. Also, descriptive by collecting data using a sample and test the theory with questionnaire.</li> </ul>				
Investigative questions	Variable(s) required	Details in which data are measured	Relation to theory	Check included in questionnaire
-what impact does marketing mix have on buying decisions of customers?	IV – buying decision of customer DP- marketing mix	Products & services Price Communication	Kotler, Keller Marketing management, principles of marketing	✓
-What impact do customer characteristics have on buying decision of customers?	IV- buying decision of customers DV- customers' characteristics	Social characteristics Personal characteristics	Kotler & Keller Marketing management, principles of marketing	✓
-Does buying the product lead to customer satisfaction	IV- buying decision of customers. DV- Customer satisfaction	After buying the product, the satisfaction is measured by 5 scale satisfaction	Solomon, hawking Customer behavior	✓
-Does customer satisfaction lead to repeated purchases?	IV- Customer satisfaction DV- repeated purchases Moderating variable- brand ecosystem	Satisfaction and repeated purchases. Brand ecosystem will moderate the relationship between satisfaction and repeated purchases	Solomon & hawking- Customer behavior; Mothersbaugh & Hawkings – consumer behavior	✓
-Do repeated purchases lead to customer loyalty?	IV- repeated purchases DV- customer loyalty MV- Increased price	Increased price will moderate the effect of repeated purchases on customer loyalty.	Solomon, hawking Customer behavior	✓

Table 1: Variables and operationalization (Own illustration)

### **3.5 Data Collection**

After having designed the survey and evaluated the validity and reliability criteria, the data collection period began. As mentioned earlier, the data for this thesis was collected using online social platforms such as Facebook, WhatsApp, and direct email to friends, family and colleagues. None of them were previously informed about this research and its goal, in order to remove all types of biases. The data collection period was conducted from 16 - 28 July. The collected data was organized in the survey platform and exported to Excel and SPSS for further analysis.

## 4 Data Analysis

This chapter analyzes the results of the collected data. In order to analyze the results, the two programs Excel and SPSS were used. The purpose of this chapter is to test the reliability of the applied scales and to verify the hypotheses. These evaluations will be used later in Chapter 5 for the discussion and the recommendations in Chapter 6.

### 4.1 Data Preparation

For analyzing the collected data, data was exported to Excel from Survey Monkey; and then from Excel to SPSS for detailed analysis. All the responses were checked for full or partial completion and the dataset was cleaned. Initial dataset revealed 108 total respondents. Yet, there were seven cases who submitted the questionnaire without answering any questions; thus, those seven cases were removed from the dataset. This resulted in a total of 101 respondents. Furthermore, there were two missing answers to the question “Which type of smartphone are you using?”. Considering that the analysis was done based on this question, these two cases were removed as well. This, then resulted in 99 valid respondents, which were included in the further analysis. Based on the available data, statistical analysis such as descriptive analysis and measures of tendency were used to see what the collected data look like. After analyzing the dataset, statistical tests such as Correlation, Chi-square, T-test, ANOVA and Regression were executed. Furthermore, based on the results, the research questions were discussed.

### 4.2 Descriptive Analysis

This part includes the descriptive analysis of the data, mainly divided into four sections. Those sections consist of demographics of respondents (including gender, age and their current brand ownership), factors impacting their decisions, their satisfaction with the product and their reported loyalty to the given product.

#### 4.2.1 Descriptive Analysis of the Sample: Demographic Information

Out of an initial total of 101 respondents included in this study, 51 percent of them were female (n=52) and 49 percent were male (n=49), as can also be seen in Table 2 below.

---

#### D1. What is your gender?

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Frequency	Percent	Valid Percent	Cumulative Percent
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<b>Valid</b>	<b>Female</b>	52	51.5	51.5	51.5
	<b>Male</b>	49	48.5	48.5	100.0
	<b>Total</b>	101	100.0	100.0	

Table 2. Gender of respondents

As shown in the following Table 3, a share of 99 respondents declared their age, with two missing cases. Respondents in this study mainly belonged to the age-group 25-34 years old (60%) or 18-24 years old (31%). There were only seven people aged 35+.

<b>D2. What is your age?</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>18-24</b>	31	30.7	31.3	31.3
	<b>25-34</b>	61	60.4	61.6	92.9
	<b>35-44</b>	4	4.0	4.0	97.0
	<b>45+</b>	3	3.0	3.0	100.0
	<b>Total</b>	99	98.0	100.0	
<b>Missing</b>	<b>99</b>	2	2.0		
<b>Total</b>		101	100.0		

Table 3. Age of respondents

More respondents (n=56) currently use/own an iOS (Apple iPhone) (55%), in comparison to 43 percent of those who currently use/own an Android (Samsung, Huawei etc.) (n=43). Due to two cases not answering this question, the total number of respondents included in the further analysis dropped to 99, as this question was the most important one for further descriptive comparisons. Also, for the purposes of this study, the testing of hypothesis was focused mainly on 56 respondents who use iOS (Apple iPhone) as a smartphone.

<b>Q1. Which type of smartphone are you using?</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>Android (Samsung, Huawei etc.)</b>	43	42.6	43.4	43.4
	<b>IOS (Apple iPhone)</b>	56	55.4	56.6	100.0
	<b>Total</b>	99	98.0	100.0	
<b>Missing</b>	<b>99</b>	2	2.0		
<b>Total</b>		101	100.0		

Table 4. Type of smartphone ownership

In general, more male (58%) than female respondents (42%) currently use Android (Samsung, Huawei etc.) as a smartphone. While, more female (59%) than male respondents (41%) currently use iOS (Apple iPhone) as a smartphone, as depicted in Table 5 below.

<b>D1. What is your gender? * Q1. Which type of smartphone are you using? Crosstabulation</b>				
		Q1. Which type of smartphone are you using?		
		Android (Samsung, Huawei etc.)	iOS (Apple iPhone)	Total
D1. What is your gender?	Female	41.9%	58.9%	51.5%
	Male	58.1%	41.1%	48.5%
Total		100.0%	100.0%	100.0%

Table 5. Smartphone ownership by gender

Android users mostly belong to the age-group of 25-34 years old (71%) or 18-24 years old (24%). The same thing applies to iOS users, from which 57 percent belong to the age-group of 25-34 years old and 36 percent are aged 18 – 24 years. This displays that iOS users are slightly younger than Android users. Yet, it should be kept in mind that there are more respondents from younger age groups (18-34) than older age groups (35+) included in this study.

<b>D2. What is your age? * Q1. Which type of smartphone are you using? Crosstabulation</b>				
		Q1. Which type of smartphone are you using?		
		Android (Samsung, Huawei etc.)	iOS (Apple iPhone)	Total
D2. What is your age?	18-24	24.4%	35.7%	30.9%
	25-34	70.7%	57.1%	62.9%
	35-44	4.9%	3.6%	4.1%
	45+		3.6%	2.1%
Total		100.0%	100.0%	100.0%

Table 6. Smartphone ownership by age groups

#### 4.2.2 Descriptive Analysis of the Factors Impacting Purchase decision

This part of the study includes results from the descriptive analysis of the factors impacting purchase decision. Thus, it shows the main influencers that drive customers to make a decision when purchasing devices such as smartphones.

The table 7 below shows that in total, more than half of respondents (53%) stated that they used other products from the same band, in comparison to 47 percent of those who said they do not. Moreover, when comparing two brands of interest, more customers of iOS (Apple iPhone) (66%)

use other products from the same brand, than customers of Android (Samsung, Huawei etc.) (37%).

<b>Q1. Which type of smartphone are you using? * Q2. Do you use other products from the same brand? Crosstabulation</b>				
		<b>Q2. Do you use other products from the same brand?</b>		
		<b>No</b>	<b>Yes</b>	<b>Total</b>
<b>Q1. Which type of smartphone are you using?</b>	<b>Android (Samsung, Huawei etc.)</b>	62.8%	37.2%	100.0%
	<b>IOS (Apple iPhone)</b>	33.9%	66.1%	100.0%
	<b>Total</b>	46.5%	53.5%	100.0%

Table 7. Do you use other products from the same brand? By smartphone ownership

In addition, according to the Table 8 below, the majority of respondents (63%) stated that they were more likely to pay an average price when buying a smartphone, while 28 percent of them said they would pay premium price and only nine percent would pay a low price for that kind of device. Comparing Android and iOS customers, these last customers are more likely to pay premium price for smartphone (36%) than Android customers (19%). Also, more Android customers (12%) reported they would be more likely to pay a low price for a smartphone, than iOS customers (7%).

<b>Q1. Which type of smartphone are you using? * Q3. What price are you more likely to pay when deciding to buy a smartphone? (Choose one) Crosstabulation</b>					
		<b>Q3. What price are you more likely to pay when deciding to buy a smartphone? (Choose one)</b>			
		<b>Low Price</b>	<b>Average Price</b>	<b>Premium Price</b>	<b>Total</b>
<b>Q1. Which type of smartphone are you using?</b>	<b>Android (Samsung, Huawei etc.)</b>	11.6%	69.8%	18.6%	100.0%
	<b>IOS (Apple iPhone)</b>	7.1%	57.1%	35.7%	100.0%
	<b>Total</b>	9.1%	62.6%	28.3%	100.0%

Table 8. What price are you more likely to pay when deciding to buy a smartphone? By smartphone ownership

Respondents were further asked to evaluate the importance of the listed product attributes when deciding to buy the smartphone they currently own. They had to rank the attributes from 1 to 5,

where 1 meant “not important” and 5 meant “very important”. In general, the three most important product attributes were considered to be their quality (4.53), battery durability (4.23) and ease of use (4.20). While, the least important attributes, according to the respondents, were product features (2.96) and communication tools (advertising, promotions, etc.) (2.55).

Android users considered the battery durability to be the most important product attribute (4.53), followed by quality of products (4.47). But, on a scale from 1 to 5, they rated communication tools on average 2.70, displaying a low importance to Android customers. On the other hand, iOS users found the quality of the product most important (4.57) when they decided to buy the product, followed by its ease of use (4.32). Similar to Android users, iOS users ranked communication tools as the attribute with the lowest importance (2.43) out of all listed attributes.

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**Q4. How important were the following products attributes while deciding to buy the device?**

**Q1. Which type of smartphone are you using?**

	Android (Samsung, Huawei etc.)			IOS (Apple iPhone)			Total		
	Mean	N	Std. Deviation	Mean	N	Std. Deviation	Mean	N	Std. Deviation
<b>Quality</b>	4.47	43	0.767	4.57	56	0.535	4.53	99	0.644
<b>Product features</b>	2.83	40	1.466	3.09	44	1.411	2.96	84	1.435
<b>Price</b>	4.19	43	0.794	3.75	56	0.858	3.94	99	0.855
<b>Ease of use</b>	4.05	42	0.825	4.32	56	0.811	4.20	98	0.824
<b>Battery durability</b>	4.53	43	0.631	4.00	56	0.688	4.23	99	0.712
<b>Camera</b>	4.24	42	0.983	3.96	55	1.105	4.08	97	1.057
<b>Product style and design</b>	3.79	42	1.048	3.91	56	0.940	3.86	98	0.984
<b>Services provided after buying (Guarantee and after sales maintenance services)</b>	3.12	42	1.418	3.13	56	1.237	3.12	98	1.310
<b>Communication tools (advertising, promotions, etc.)</b>	2.70	43	1.225	2.43	56	1.173	2.55	99	1.198

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Table 9. How important were the following product attributes while deciding to buy the device? By smartphone ownership

Respondents were given four communication tools to choose from, as their preferred way of communication from the smartphone provider. Since the question was a multiple options question, they could answer with more than one option. While Android users mostly chose advertising (e.g. TV, radio etc.) (44%) as their preferred communication tool, iOS users mostly chose personal selling in store (from representatives of the company) (52%). According to Table 10 below, the least chosen communication tool for Android users was public relations (news stories, features, sponsorships and events) (19%), whereas advertising (e.g. TV, radio etc.) was least chosen by iOS users (25%).

<b>Q5. Which of the communication tools do you prefer from the smartphone provider?</b>		
	<b>Q1. Which type of smartphone are you using?</b>	
	<b>Android (Samsung, Huawei etc.)</b>	<b>IOS (Apple iPhone)</b>
<b>Advertising (e.g. TV, radio etc.)</b>	44.2%	25.0%
<b>Personal selling in store (from representatives of the company)</b>	23.3%	51.8%
<b>Public relations (news stories, features, sponsorships and events)</b>	18.6%	32.1%
<b>Sales promotion (coupons, discounts)</b>	34.9%	39.3%
<b>Total</b>	43	56

Table 10. Which of the communication tools do you prefer from the smartphone provider? By smartphone ownership

Generally, when buying a smartphone, respondents consider personal lifestyle as the most important factor (3.68) influencing that decision, followed by brand personality (3.57). This evaluation was done on a scale from 1 to 5, where 1 meant not important and 5 meant very important. Word-of-mouth communication (personal words from trusted friends, associates etc.) was generally considered as the least important factor, rated on average 2.51.

Results in Table 11 show that Android users consider brand personality as the most important factor when buying a device (3.48) and opinion leaders (people that can influence others because of special skills and knowledge) as the least important (2.48). On the other hand, personal lifestyle is considered as the most important factor (3.95) that iOS customers consider when buying a

smartphone. While, word-of-mouth communication (personal words from trusted friends, associates etc.) is the least important factor according to them (2.43).

	Android (Samsung, Huawei etc.)		IOS (Apple iPhone)		Total				
	Mea n	N	Std. Deviation	Mea n	N	Std. Deviation			
<b>Q6. When buying a smartphone, how important are each of the following to you?</b>									
<b>Q1. Which type of smartphone are you using?</b>									
<b>Word-of-mouth communication (personal words from trusted friends, associates etc.)</b>	2.60	43	1.514	2.43	5 6	1.219	2.51	9 9	1.351
<b>Opinion leader (people that can influence others because of special skills and knowledge)</b>	2.48	42	1.215	2.66	5 6	1.164	2.58	9 8	1.183
<b>Online social networks ( e.g. Facebook, Instagram, Snapchat)</b>	2.67	43	1.459	2.57	5 6	1.333	2.62	9 9	1.383
<b>Friends and family</b>	3.14	42	1.441	3.27	5 6	1.213	3.21	9 8	1.310
<b>Brand personality</b>	3.48	42	1.348	3.64	5 6	1.151	3.57	9 8	1.235
<b>Personal lifestyle</b>	3.33	42	1.203	3.95	5 6	1.017	3.68	9 8	1.136

Table 11. When buying a smartphone, how important are each of the following to you? By smartphone ownership

### 4.2.3 Descriptive Analysis of the Customer Satisfaction with the Product

This section includes the descriptive analysis deriving from questions that measured customers' satisfaction with the product, after having purchased it.

The following Table 12 depicts the level of customer satisfaction with the listed attributes of the purchased device. Looking at the total bar, it can be seen that product quality and ease of use were both equally evaluated (4.60) as quite satisfactory, on a scale from 1 to 5 (where 1 meant not at all

satisfied and 5 meant very satisfied). The lowest rated attribute after purchasing the product was its price (3.59).

Android users are mostly satisfied with product quality (4.62) and ease of use (4.52), as are iOS users (4.58 and 4.67, respectively). On the other hand, Android users seem to be least satisfied with guarantee and after-sales maintenance service (3.93). While, iOS users rate the price of the product as the least satisfactory factor after purchasing the product (3.29).

<b>Q7. Evaluate your satisfaction after buying the product.</b>									
<b>Q1. Which type of smartphone are you using?</b>									
	<b>Android (Samsung, Huawei etc.)</b>			<b>IOS (Apple iPhone)</b>			<b>Total</b>		
	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
<b>Product quality</b>	4.62	42	0.539	4.58	55	0.567	4.60	97	0.553
<b>Product features</b>	4.33	42	0.721	4.40	55	0.683	4.37	97	0.697
<b>Style and design</b>	4.31	42	0.811	4.51	55	0.742	4.42	97	0.775
<b>Price</b>	4.00	41	0.949	3.29	55	0.809	3.59	96	0.936
<b>Camera</b>	4.00	42	1.059	4.20	55	0.931	4.11	97	0.988
<b>Battery durability</b>	4.07	42	1.045	3.75	55	1.058	3.89	97	1.059
<b>Ease of use</b>	4.52	42	0.634	4.67	54	0.700	4.60	96	0.672
<b>Guarantee and after sales maintenance service</b>	3.93	42	0.921	3.62	55	1.027	3.75	97	0.990

Table 12. Evaluate your satisfaction after buying the product. By smartphone ownership

In addition, respondents were also asked to evaluate their overall satisfaction with the device they purchased, on a scale from 1 to 100. While the general evaluation was 81.55 (n=97), Table 13 below suggests that iOS users were slightly more satisfied with their product (82.44, n=55), in comparison to Android users (80.38, n=42).

<b>Q8. Overall, how satisfied are you with the device that you purchased?</b>			
<b>Q1. Which type of smartphone are you using?</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
<b>Android (Samsung, Huawei etc.)</b>	80.38	42	16.596

<b>IOS (Apple iPhone)</b>	82.44	55	13.681
<b>Total</b>	81.55	97	14.965

Table 13. Overall, how satisfied are you with the device that you purchased? By smartphone ownership

In total, the majority of respondents stated that this was not the first time that they have purchased a mobile device from their brand of choice (79%), in comparison to 21 percent of those who stated differently. Yet, as Table 14 below shows, a higher percentage of iOS customers have purchased a mobile device from this brand earlier (87%), in comparison to almost 70 percent of Android customers (69%).

<b>Q1. Which type of smartphone are you using? * Q9. Is this the first time that you purchased a mobile device from this brand? Crosstabulation</b>		<b>Q9. Is this the first time that you purchased a mobile device from this brand?</b>		
		<b>No</b>	<b>Yes</b>	<b>Total</b>
<b>Q1. Which type of smartphone are you using?</b>	<b>Android (Samsung, Huawei etc.)</b>	69.0%	31.0%	100.0%
	<b>IOS (Apple iPhone)</b>	87.3%	12.7%	100.0%
<b>Total</b>		79.4%	20.6%	100.0%

Table 14. Is this the first time that you purchased a mobile device from this brand? By smartphone ownership

#### 4.2.4 Descriptive Analysis of the Customer Loyalty to the Brand

Brand loyalty is an important factor that may guarantee customer retention and increase company profit. Thus, this section covers the questions used to elaborate on the level of customer loyalty towards their brand of choice, as reported by 99 respondents included in this study.

On a scale from 1 to 5, where 1 meant very unlikely and 5 meant very likely, respondents had to answer on the statement “I will purchase the same brand again.” In general, this statement was evaluated on average 3.67 (n=92), which leans slightly towards likelihood of repurchase.

Comparing two brands of interest, Table 15 shows that customers of iOS products said they were significantly more likely to repurchase from this brand (4.23, n=52), as opposed to Android users who were reportedly less likely to do the same (2.95, n=40).

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#### **Q10. I will purchase the same brand again.**



**Q1. Which type of smartphone are you using?**

	Mean	N	Std. Deviation
<b>Android (Samsung, Huawei etc.)</b>	2.95	40	1.853
<b>IOS (Apple iPhone)</b>	4.23	52	1.503
<b>Total</b>	3.67	92	1.773

Table 15. I will purchase the same brand again. By smartphone ownership

The following Table 16 depicts the level to which respondents agree with the listed statements, based on an evaluation on a scale from 1 to 5, where 1 meant strongly disagree and 5 meant strongly agree. By and large, customers agree more with the statement that their smartphone offered a good value for the money they paid (4.04), while they tend not to agree that they would buy the brand, even if the company raised their prices each year (2.70).

Both Android customers and iOS customers tend to agree more that their smartphone offered a good value for the money they paid (4.10 and 4.00, respectively). Similarly, both Android and iOS customers agree that when they are loyal to the brand, they would recommend their products to others (3.95 and 4.08, respectively). Android users are least likely to agree that they would buy the brand, even if the company increases prices each year, with the average evaluation being 2.43. On the other hand, iOS customers agree the least with the statement that they would switch to other competitors, if they would offer similar but cheaper smartphones (2.69).

**Q11. How do you agree with the following statements as a customer?****Q1. Which type of smartphone are you using?**

	Android (Samsung, Huawei etc.)		IOS (Apple iPhone)		Total		Std. Deviation
	Mean	N	Mean	N	Mean	N	
<b>My smartphone offered a good value for the money I paid</b>	4.10	40	4.00	52	4.04	92	0.573
<b>I would switch to other competitors if they would offer similar but cheaper smartphones</b>	3.53	40	2.69	52	3.05	92	1.261
<b>I am satisfied with the product because of the brand ecosystem</b>	3.48	40	3.71	52	3.61	92	0.960

<b>I stick to the brand because of the brand ecosystem</b>	3.20	40	1.224	3.37	52	1.085	3.29	92	1.144
<b>I would buy the brand even if the company increase prices every year</b>	2.43	40	1.010	2.90	52	1.089	2.70	92	1.077
<b>When I am loyal to the brand, I would recommend the product to others</b>	3.95	40	0.749	4.08	52	0.813	4.02	92	0.784

Table 16. How do you agree with the following statements as a customer? By smartphone ownership

The following Table 17 shows how far customers are willing to go in order to remain loyal to their brand of choice. In general, most of respondents (30%) claimed that, if the company was to increase prices by CHF 100-200, that is as far as they would go in terms of continuing to purchase their products. However, a total of 22.5 percent of respondents stated that price increase doesn't matter; they would not switch to another brand, despite the price increase of the products they tend to purchase.

The majority of Android users stated they would either switch brands when the company increases prices by CHF 100-200 (45%), or CHF 0-100 (26%). The majority of iOS users said they would stop buying their brand when the company increased prices from CHF 0-100 (31%) or more than CHF 200 (25%). A higher percentage of iOS users (23%) said that price increase wouldn't matter to them, in comparison to 21 percent of Android users.

<b>Q1. Which type of smartphone are you using? * Q12. I would buy the brand until the company increases prices from: Crosstabulation</b>		<b>Q12. I would buy the brand until the company increases prices from:</b>				<b>Total</b>
		<b>CHF 0-100</b>	<b>CHF 100-200</b>	<b>More than CHF 200</b>	<b>Price increase doesn't matter</b>	
<b>Q1. Which type of smartphone are you using?</b>	<b>Android (Samsung, Huawei etc.)</b>	26.3%	44.7%	7.9%	21.1%	100.0%
	<b>IOS (Apple iPhone)</b>	31.4%	19.6%	25.5%	23.5%	100.0%
<b>Total</b>		29.2%	30.3%	18.0%	22.5%	100.0%

Table 17. I would buy the brand until the company increases prices from: By smartphone ownership

On the matter of customer brand loyalty, the respondents were also asked to put a number on the loyalty increase, after having purchased the product more than once. As it can be seen in Table 18 below, the total mean number is 66.93 (on a scale from 1 to 100) (n=92). Yet, iOS customers declared a higher increase in loyalty (71.40, n=52), in comparison to Android users (61.13, n=40).

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**Q13. How much has your loyalty to the brand increased after purchasing the product more than one time?**

**Q1. Which type of smartphone are you using?**

	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
<b>Android (Samsung, Huawei etc.)</b>	61.13	40	22.907
<b>IOS (Apple iPhone)</b>	71.40	52	23.819
<b>Total</b>	66.93	92	23.856

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Table 18. How much has your loyalty to the brand increased after purchasing the product more than one time? By smartphone ownership

Furthermore, Table 19 below depicts the average loyalty, as reported by respondents in this study. In general, 92 respondents answered with an average of 71.76 scale of loyalty to their brand. Specifically, iOS users tend to be more loyal to their brand (77.19, n=52) than Android users (64.70, n=40), according to the table.

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**Q14. How loyal are you to the brand you are using?**

<b>Q1. Which type of smartphone are you using?</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
<b>Android (Samsung, Huawei etc.)</b>	64.70	40	26.237
<b>IOS (Apple iPhone)</b>	77.19	52	22.530
<b>Total</b>	71.76	92	24.865

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Table 19. How loyal are you to the brand you are using? By smartphone ownership

On the multiple-choice question below, respondents suggested the changes they wanted to see from their preferred company in the future, in order to remain satisfied with their products. Three most mentioned changes were the same by both Android and iOS user. Those changes included: quality improvement (60% Android, 58% iOS), lower prices (52% Android, 69% iOS) and improved security (45% Android, 36% iOS). Yet, as can be seen from Table 20, more users of Android products (10%) stated that they would not change anything, as compared to six percent of iOS users who said the same.

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**Q15. What changes would you want to see from the company in the future to keep you satisfied?**

<b>Q1. Which type of smartphone are you using?</b>			
	<b>Android (Samsung, Huawei etc.)</b>	<b>IOS (Apple iPhone)</b>	<b>Total</b>
<b>Improve quality</b>	60.0%	57.7%	
<b>Change design &amp; style</b>	12.5%	21.2%	
<b>Lower price</b>	52.5%	69.2%	
<b>Improve services</b>	25.0%	34.6%	
<b>Improve security</b>	45.0%	36.5%	
<b>Change marketing strategy</b>	12.5%	1.9%	
<b>Nothing at all</b>	10.0%	5.8%	
<b>Total</b>	40	52	92

Table 20. What changes would you want to see from the company in the future to keep you satisfied? By smartphone ownership

### 4.3 Reliability Tests of the Applied Scales

This section focuses on the analysis of reliability of the applied scales included in the questionnaire. Reliability tests measure the internal consistency of the questionnaire, which describes the extent to which all the items in a test measure the same concept. This reliability test was conducted using the Cronbach's Alpha scale, which is expressed as a number between 0 and 1. The higher the score, the higher the reliability of the scale (Tavakol & Dennick, 2011). Generally, researchers want to assess the existence of possible deviations of the reliability, which would result in no correlation between statements meant to measure the same thing.

Cronbach's Alpha scale of above .70 is generally considered as an acceptable score. While a score of 0.90+ shows an excellent internal consistency of the scale, anything below 0.7 is considered a moderate or not satisfactory score (Taber, 2018). Yet, many authors seem to disagree whether scores below 0.7 are in fact to be discredited, but since nothing has been proven yet, we will consider only scores higher than 0.7 as reliable measures of the scale.

#### 4.3.1 Reliability Test for Customer Satisfaction with the Product

The following Table 21 shows the Cronbach's Alpha scale of  $\alpha = .722$ . This score shows an acceptable internal consistency of the scale, which means that the eight questions were correlated to each other when measuring customer satisfaction with the product. Because the removal of any questions did not prove to increase the reliability level, no item was deleted from the measurement.

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#### Reliability Statistics

<b>Cronbach's Alpha Based on</b>		
<b>Cronbach's Alpha</b>	<b>Standardized Items</b>	<b>N of Items</b>
.722	.735	8

Table 21. Reliability analysis for Customer Satisfaction with the Product

### 4.3.2 Reliability Test for Factors Impacting Purchase Decision

The Table 22 below shows the reliability test done for six items meant to measure the importance of product attributes when choosing a given product. As can be observed, Cronbach's Alpha score is .654, revealing a questionable internal reliability. With the removal of one item, the reliability score would increase. However, in order to test them in a regression model for the evaluation of one of the posed hypotheses, no changes were made.

<b>Reliability Statistics</b>		
<b>Cronbach's Alpha Based on</b>		
<b>Cronbach's Alpha</b>	<b>Standardized Items</b>	<b>N of Items</b>
.646	.654	6

Table 22. Reliability analysis for Factors Impacting Purchase Decision

## 4.4 Testing of Hypotheses

This section includes results from the testing of nine posed hypotheses, defined in Section 2.6. Tests that were used for hypotheses were T test, multiple linear regression and correlation. Hypotheses 1a, 3, 4 and 5 include data only for iOS (Apple iPhone) users, while hypotheses 1b, 1c, 2a and 2b include comparisons for customers of both brands (iOS and Android).

### 4.4.1 Hypothesis 1a

Hypothesis 1a: *“Satisfaction with product quality has a positive effect on overall customer satisfaction”*.

This statement assumes that product quality is the most important product attribute, in predicting overall customer satisfaction. Thus, customers who are satisfied with the quality of the product, are more likely to be satisfied with the product overall. In order to test the relationship between these two items, a one-tailed correlation test was conducted. The correlation coefficient is used to investigate the association between two interval or ordinal variables, and its values rank from -1 (expressing negative correlation) to 1 (expressing positive correlation). The closer the value is to -1 or 1, the more significant the correlation is (González, Herrador, Asuero, & Sayago, 2006). The

one-tailed test provides more power to detect an effect in one direction, by not testing the effect in the other direction. Since the hypothesis predicts a positive relationship, the one-tailed correlation was the most suitable solution.

As can be observed in the Table 23 below, there is a significant positive correlation between satisfaction with product quality and overall satisfaction with the product ( $r=.372$ ,  $p<.01$ ). This means that with the increase in satisfaction with the quality of the product, the overall satisfaction of the product is more likely to increase. *Thus, this hypothesis is approved.*

		<b>Correlations</b>	
		Q8. Evaluate your satisfaction after buying the product. Product quality	Q9. Overall, how satisfied are you with the device that you purchased?
Q8. Evaluate your satisfaction after buying the product.	Pearson Correlation	1	.372**
	Sig. (1-tailed)		.003
Product quality	N	55	55
Q9. Overall, how satisfied are you with the device that you purchased?	Pearson Correlation	.372**	1
	Sig. (1-tailed)	.003	
	N	55	55

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Table 23. Correlation between satisfaction with product quality and overall satisfaction with the product

#### 4.4.2 Hypothesis 1b

Hypothesis 1b: *“Price has a significant impact on customers’ buying decision”*.

The hypothesis above states that customers’ perception of price importance will determine which product they choose to purchase. In order to measure that, an independent samples t-test was employed. The independent samples t-test is used to compare sample means from two independent groups for an interval-scale variable, when the distribution is approximately normal (McCrum-Gardner, 2008). For this purpose, this hypothesis was tested comparing both buying decisions for Android and iOS products.

As Table 24 shows, on a scale from 1 to 5 (where 1 means not important at all and 5 very important), customers who rated price importance on average 4.19 were more likely to choose Android products, while those who rated price on average 3.75 were more inclined to choose iOS

products. According to Table 25, the independent samples t-test determined that this difference between two groups was significant ( $t=2.587, p<.05$ ). *These findings support the hypothesis 1b.*

<b>Q1. Which type of smartphone are you using?</b>					
		N	Mean	Std. Deviation	Std. Error Mean
Price	Android (Samsung, Huawei etc.)	43	4.19	.794	.121
	IOS (Apple iPhone)	56	3.75	.858	.115

Table 24. Results of the T-test analysis for smartphone users regarding price importance

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper	
Price	Equal variances assumed	.422	.518	2.587	97	.011	.436	.169	.102	.771
	Equal variances not assumed			2.614	93.595	.010	.436	.167	.105	.767

Table 25. Descriptive statistics of price importance on purchase decision

### 4.4.3 Hypothesis 1c

Hypothesis 1c: *“Communication tools have a positive impact on customers’ buying decision”*

This statement posits that communication tools such as advertising, promotions, etc. are positive influencers of customer buying decision. To measure this, an independent samples t-test was conducted and reflected in both tables below.

Table 26 depicts that customers who considered communication tools as more important (2.70, on a scale from 1 to 5, where 1 meant not at all important and 5 meant very important) were more inclined to choose Android products, in comparison to those who saw them important on a scale of 2.43 that would rather choose iOS products. Since the means do not differ greatly amongst one another, Table 27 shows independent samples test results, which conclude that the difference is insignificant ( $t=1.110$ ,  $p>.05$ ). *In turn, this hypothesis is rejected.*

<b>Q1. Which type of smartphone are you using?</b>					
		N	Mean	Std. Deviation	Std. Error Mean
Communication tools (advertising, promotions, etc.)	Android (Samsung, Huawei etc.)	43	2.70	1.225	.187
	IOS (Apple iPhone)	56	2.43	1.173	.157

Table 26. Descriptive statistics of communication tools importance on purchase decision

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Communication tools (advertising, promotions, etc.)	Equal variances assumed	.619	.433	1.110	97	.270	.269	.243	-.212	.750
	Equal variances not assumed			1.103	88.466	.273	.269	.244	-.216	.754

Table 27. Results of the T-test analysis for smartphone users regarding communication tools importance

#### 4.4.4 Hypothesis 2a

Hypothesis 2a: “Reference groups, word-of-mouth (WOM) and family have an effect on the buying decisions of customers.”



When it comes to their importance for customers, the hypothesis states that reference groups, word-of-mouth communication and family can impact whether customers choose to purchase Android or iOS products. In order to measure that, once again independent samples t-test was used.

It can be seen in Table 28 below that the mean difference between those who chose Android or iOS based on how important they found reference groups, WOM and family, is not large. This is supported by t-test results in Table 29, which show that the difference is in fact insignificant ( $t = -.180, p > .05$ ); thus, *disproving the above-mentioned hypothesis*.

<b>Q1. Which type of smartphone are you using?</b>					
		N	Mean	Std. Deviation	Std. Error Mean
Q6_ref_friends_wom	Android (Samsung, Huawei etc.)	4	2.754	.93721	.14462
	IOS (Apple iPhone)	5	2.785	.80259	.10725
		6	7		

Table 28. Descriptive statistics of reference groups, WOM and friend's importance on purchase decision

<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q6_ref_friends_wom	Equal variances assumed	1.178	.280	-.180	96	.857	-.03175	.17609	-.38128	.31779
	Equal variances not assumed			-.176	80.378	.860	-.03175	.18005	-.39002	.32653

Table 29. Results of the T-test analysis for smartphone users regarding reference groups, WOM and friend's importance

#### 4.4.5 Hypothesis 2b

Hypothesis 2b: “Personal lifestyle and brand personality have an effect on the buying decision of customers”

The perceived importance of personal lifestyle and brand personality may just affect whether customers choose to purchase iOS or Android devices, according to the hypothesis 2b above. This was measured using independent samples t-test to assess potential differences between two different buying decisions (iOS or Android).

As seen in Table 30, those who perceive personal lifestyle and brand personality on average 3.40 important (on a scale from 1 to 5) are more likely to choose Android users. While, those who evaluate these factors’ importance on average 3.79 are more inclined to choose iOS products. As can be predicted, and also proven in Table 31, this difference is insignificant – as stated by t-test results ( $t=-.1890, p>.05$ ). These results reject the posed hypothesis.

		N	Mean	Std. Deviation	Std. Error Mean
Q6_personality_lifestyle	Android (Samsung, Huawei etc.)	42	3.4048	1.08896	.16803
	IOS (Apple iPhone)	56	3.7946	.94761	.12663

Table 30. Descriptive statistics of personal lifestyle and brand personality importance on purchase decision

Independent Samples Test										
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q6_personality_lifestyle	Equal variances assumed	1.475	.228	-1.890	96	.062	-.38988	.20625	-.79928	.01952

Equal	-1.853	81.257	.068	-.38988	.21040	-	.02873
variances						.80850	
not							
assumed							

Table 31. Results of the T-test analysis for smartphone users regarding personal lifestyle and brand personality

#### 4.4.6 Hypothesis 3

Hypothesis 3: “*First time purchase has a positive effect on customer satisfaction*”.

The hypothesis stated above wants to assess the effect of first-time purchase of iOS products on customer satisfaction with the product. In other words, it suggests that first-time buyers are more satisfied with the product. In order to test this hypothesis, Independent Samples T-test was used.

As the following Table 23 displays, first-time buyers were on average 82.86 satisfied (on a scale from 0 to 100), while repeated buyers were on average 82.38 satisfied. Since the difference between means is quite little, the independent samples test in Table 24 finds this difference insignificant ( $p > .05$ ). Consequently, the third hypothesis is rejected.

		<b>Q10. Is this the first time that you purchased a mobile device from this brand?</b>			
		N	Mean	Std. Deviation	Std. Error Mean
Q9. Overall, how satisfied are you with the device that you purchased?	No	48	82.38	13.504	1.949
	Yes	7	82.86	15.994	6.045

Table 32. Descriptive Statistics of first-time users and repeat buyers

		<b>Independent Samples Test</b>								
		Levene's Test for Equality of Variances				t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q9. Overall, how	Equal variances assumed	.122	.728	-	53	.932	-.482	5.587	-	10.724
				.086					11.688	

satisfied are you with the device that you purchased?	Equal variances not assumed	- .076	7.302	.942	-.482	6.352	- 15.376	14.412
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Table 33. Results of the T-test analysis for first-time users and repeat buyers

#### 4.4.7 Hypothesis 4

Hypothesis 4: *“The more satisfied the customer is, the more likely he/she is to repeat the purchase of the product”.*

The above-mentioned hypothesis aims to find a connection between customer satisfaction and their likelihood of product repurchase. That is to say the higher the customers’ satisfaction with the product, the higher their likelihood to repurchase the product. To measure this, a one-tailed correlation was used. Table 25 below shows the results of the correlation between level of satisfaction with iOS devices and the likelihood of customers to purchase the same brand again. These two items seem not to be significantly correlated ( $r=.211, p>.05$ ).

<b>Correlations</b>			
		Q9. Overall, how satisfied are you with the device that you purchased?	Q11. I will purchase the same brand again.
Q9. Overall, how satisfied are you with the device that you purchased?	Pearson	1	.211
	Correlation		
	Sig. (1-tailed)		.066
	N	55	52
Q11. I will purchase the same brand again.	Pearson	.211	1
	Correlation		
	Sig. (1-tailed)	.066	
	N	52	52

Table 34. Correlation analysis results for customer satisfaction and likelihood of repurchase

#### 4.4.8 Hypothesis 4a

Hypothesis 4a: *“Brand ecosystem will moderate the effect of customer satisfaction on repeated purchase intention”.*

This hypothesis suggests that brand ecosystem will change how customer satisfaction impacts repeated purchase intention. In order to test this, a linear regression was conducted, as depicted in tables 35 to 37 below. The purpose of the regression analysis is to evaluate the relative impact of a predictor variable on a particular outcome, with the purpose of examining the strength and direction of the relationship (Zou, Tuncali, & Silverman, 2003).

An interaction term between satisfaction and importance of ecosystem was added to the model, in order to test the possible mediation. However, the interaction term had an insignificant coefficient in the regression equation ( $p > .05$ ). This implies that brand ecosystem does not have a mediating role when it comes to the effect of customer satisfaction on repeated purchase intentions. *Thus, this hypothesis is refused.*

Model Summary <sup>c</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.211 <sup>a</sup>	.045	.026	1.484	
2	.226 <sup>b</sup>	.051	.012	1.494	2.264

a. Predictors: (Constant), Q9. Overall, how satisfied are you with the device that you purchased?

b. Predictors: (Constant), Q9. Overall, how satisfied are you with the device that you purchased?, satisfaction\_x\_ecosystem

c. Dependent Variable: Q11. I will purchase the same brand again.

Table 35. Model summary of simple linear regression for brand ecosystem mediating satisfaction on repeated purchase

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.152	1	5.152	2.340	.132 <sup>b</sup>
	Residual	110.079	50	2.202		
	Total	115.231	51			
2	Regression	5.877	2	2.938	1.317	.277 <sup>c</sup>
	Residual	109.354	49	2.232		
	Total	115.231	51			

a. Dependent Variable: Q11. I will purchase the same brand again.

b. Predictors: (Constant), Q9. Overall, how satisfied are you with the device that you purchased?

c. Predictors: (Constant), Q9. Overall, how satisfied are you with the device that you purchased?  
satisfaction\_x\_ecosystem

Table 36. ANOVA for brand ecosystem mediating satisfaction on repeated purchase

		Coefficients <sup>a</sup>				
		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.202	1.342		1.640	.107
	Q9. Overall, how satisfied are you with the device that you purchased?	.024	.016	.211	1.530	.132
2	(Constant)	2.214	1.352		1.638	.108
	Q9. Overall, how satisfied are you with the device that you purchased?	.019	.019	.165	1.027	.309
	satisfaction x ecosystem	.001	.003	.092	.570	.571

a. Dependent Variable: Q11. I will purchase the same brand again.

Table 37. Coefficients for the simple linear regression for brand ecosystem mediating satisfaction on repeated purchase

#### 4.4.9 Hypothesis 5

Hypothesis 5: *“Repeated purchase intention has a positive impact on brand loyalty”*

This hypothesis implies that customers who are more likely to purchase iOS products again, tend to show higher loyalty to this brand, than those who are less likely to do so. For the purpose of this assessment, a simple linear regression was used. The purpose of simple regression analysis is to evaluate the relative impact of a predictor variable on a particular outcome, with the purpose of examining the strength and direction of the relationship (Zou et al., 2003).

A simple linear regression was calculated to predict brand loyalty based on repeated purchase intention. A significant regression equation was found ( $F(1,92) = 26.339, p < .000$ ), with an  $R^2$  of .223. Furthermore, participant’s loyalty increased 6.921 for each repeated purchase, as depicted in Table 37. *This concludes that the hypothesis stated above is approved.*

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.472 <sup>a</sup>	.223	.214	22.904	1.923

a. Predictors: (Constant), Q11. I will purchase the same brand again.

b. Dependent Variable: Q15. How loyal are you to the brand you are using?

Table 38. Model summary of the simple linear regression for brand loyalty

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13817.103	1	13817.103	26.339	.000 <sup>b</sup>
	Residual	48261.706	92	524.584		
	Total	62078.809	93			

a. Dependent Variable: Q15. How loyal are you to the brand you are using?

b. Predictors: (Constant), Q11. I will purchase the same brand again.

Table 39. ANOVA for brand loyalty

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	45.800	5.498		8.331	.000
	Q11. I will purchase the same brand again.	6.921	1.349	.472	5.132	.000

a. Dependent Variable: Q15. How loyal are you to the brand you are using?

Table 40. Coefficients for the simple linear regression for brand loyalty

#### 4.4.10 Hypothesis 5a

Hypothesis 5a: *“Increased price will moderate the effect of repeated purchase intention on brand loyalty.”*

This hypothesis means to imply that if the price of a product increased, this would change the direction in which repeated purchase would impact brand loyalty. To test this assumption, the tables below show results of simple linear regression analysis.

An interaction term was added to the model, in order to test the possible mediation. Given that the regression model shows the interaction term as insignificant ( $p < .05$ ), it concludes that increased price does not mediate the effect of repeated purchase intention on brand loyalty. *This confirms that the posed hypothesis is refused.*

Model Summary <sup>c</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.407 <sup>a</sup>	.166	.149	20.780	
2	.455 <sup>b</sup>	.207	.174	20.469	1.417

a. Predictors: (Constant), Q11. I will purchase the same brand again.

b. Predictors: (Constant), Q11. I will purchase the same brand again., repurchase\_x\_price

b. Dependent Variable: Q15. How loyal are you to the brand you are using?

Table 41. Model summary of the simple linear regression for increased price mediating effect of repeated purchase on brand loyalty

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4199.377	1	4199.377	9.725	.003 <sup>b</sup>
	Residual	21158.309	49	431.802		
	Total	25357.686	50			
2	Regression	5246.305	2	2623.152	6.261	.004 <sup>c</sup>
	Residual	20111.382	48	418.987		
	Total	25357.686	50			

a. Dependent Variable: Q15. How loyal are you to the brand you are using?

b. Predictors: (Constant), Q11. I will purchase the same brand again.

c. Predictors: (Constant), Q11. I will purchase the same brand again., repurchase\_x\_price

Table 42. ANOVA for increased price mediating effect of repeated purchase on brand loyalty

### Coefficients<sup>a</sup>



Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	51.229	8.684		5.899	.000
	Q11. I will purchase the same brand again.	6.053	1.941	.407	3.119	.003
2	(Constant)	51.688	8.559		6.039	.000
	Q11. I will purchase the same brand again.	3.814	2.379	.256	1.603	.116
	repurchase x price	.869	.550	.253	1.581	.121

a. Dependent Variable: Q15. How loyal are you to the brand you are using?

Table 43. Coefficients for increased price mediating effect of repeated purchase on brand loyalty

## 5 Discussion

This chapter includes the detailed elaboration of the questionnaire and the derived results. It explains the hypotheses overall and evidence support on disproven hypotheses. The main aim of this thesis was to determine differences in consumer purchase behavior, based on whether they were iOS (Apple iPhones) or Android (Samsung, Huawei, etc.) customers. The whole analysis was done to gain more insight into what customers find more important when choosing brands and how smartphone providers can retain their customers and create loyal customers.

This study only focuses on Switzerland and mainly on iOS customers; with some analysis done to compare iOS customers to Android customers. To address the objectives, this paper focused on customer perception regarding product quality, product features, product style and design, and product services, among other attributes. This study was also quite focused on the price of the product as the driver of overall satisfaction and repurchase of the product. In addition, communication tools (such as advertising, public relations, sales promotion, personal selling, etc.) were analyzed, which customers perceived as the most important factors determining their purchase behavior. Despite factors that persuade customers to purchase a device from a given brand, their after-purchase behavior was also assessed. That included measuring their satisfaction with the product, the chance of repurchase and their reported loyalty to the brand they purchased from.

To reach the objectives that were defined in the beginning, this study underwent several phases. First, a detailed literature review was done to build a solid base for the entire work. After that, a theoretical framework with hypotheses and variables was developed, and in the end, an online survey questionnaire was developed to get insights from the actual customers who purchased and are willing to purchase the brand in the future.

The questionnaire consisted of different scales which were tested and count to be reliable. There were 101 respondents included in this study, 55 percent of which (n=56) were iOS users, and 43 percent (n=43) were Android users. The analysis section was further divided into three parts: a descriptive analysis of the factors impacting purchase decision, customer satisfaction with the product, and customer loyalty to the brand.

The first hypothesis developed for this thesis was designed for the customer in the early stage of the buying decision. Because the first part was about the marketing stimuli, a total of three hypotheses were developed to measure the impact of each one of them in the CBB. After testing hypotheses 1a and 1b were supported, and hypothesis 1c was rejected. H1a and H1b were shown to have significant effects on the BD of customers. Product features, attributes, and the price has a significant impact on their decision to buy a smartphone. Whereas, H1c was rejected, as customers did not evaluate communication tools provided by the companies to have a significant impact on their BD. Even though communication tools such as advertising and personal selling were proven to have a significant impact on customers' BD Bashir & Malik (2010, p. 9); Hocking (2013, p. 95), their interest was low, and communications tools were ranked last in the questionnaire. On the other hand, product quality was one of the most important attributes evaluated by the customer, and therefore, it had a high impact on CS. This is also proven by (Agyekum, Haifeng, & Agyeiwaa, 2015, p. 25) and Mohd Puad et al. (2016). Also, price had a significant impact on the BD of customers. Same conclusion was also proven by Walia & Singla (2017) where prices was listed as one of the most important elements that influence customers BD. Hence, Apple customers were more likely to pay premium prices, whereas Android users were more likely to pay low prices for their smartphone. Customer perceptions from the beginning rank Apple as a premium brand over Android users.

The second hypothesis was about the customer characteristics and was also divided into two hypotheses, H2a and H2b. After testing them, both hypotheses were rejected, as they were not proven to have a significant impact on the BD of customers. Hence, personal lifestyle was the most important characteristic that influences the BD of customers. Research from Joseph (2012, p. 295) showed that lifestyle has an important role on the customers BD. However, in this research, there was not a significant effect to support this hypothesis. On the other hand, WOM was the least important characteristic for the customers. Even though Guha (2017) found that WOM, friends, and family have a strong influence on the BD of customers, in this research, this is disproven.

The third hypothesis assumes that first-time purchase has a positive impact on customer satisfaction. Based on the results, the difference between first-time buyers and repeated buyers is small. Therefore, the third hypothesis is rejected, as it takes more time for customers to spend with the product in order to gain satisfaction.

Based on the fourth assumption, it was hypothesized that the more satisfied the customer is, the more likely he/she is to repeat the purchase of the product. The analysis showed that Apple customers were more satisfied overall with the product and were more likely to repeat the purchase. This shows a high commitment of Apple customers to the brand and therefore, gives a signal that they are moving towards creating loyalty with the brand. Gupta & Stewart (1996) stated that the connection between CS and RI very strong. Indroo, He & Echambadi (2016) also stated that satisfied customers will repeat their purchases in the future. Therefore, the fourth hypothesis is accepted.

Hypothesis 4a suggested that brand ecosystem will change the relationship between CS and repurchase intention. Hence, the hypothesis was tested, and no significant effect was shown to change how CS changes RI. Even though Schultz, Zarnekow, & Berlin (2011) stated that Apple uses a more lock-in system that keeps the customer in brand ecosystem, in this research, brand ecosystem could not affect this relationship. With or without the brand ecosystem, customers that are satisfied with the product will keep repeating their purchases. However, brand ecosystem has an important place in the mind of the customers when it comes to the usage of the device.

Hypothesis 5 measured the loyalty of the customers. It assumes that RI has a positive impact on BL. This hypothesis is accepted as both iOS and Android smartphone users increased their loyalty after repeating their purchases. Can (2017) and Hamad (2014) stated that there is a positive relationship between BL and RI. The more customers buy, the more their loyalty for the brand increases. Hence, the loyalty from the iOS users was significantly higher than Android users. This shows the impact of the Apple brand, as a very committed company, to keep their customers loyal and prevent them from switching to their competitors. In every stage that customers were asked about their loyalty, iOS users tend to be more loyal and not switch.

Moreover, asked about the price, 23 percent of iOS users did not care if the price of the device will increase or not. iOS users agreed the least that they will switch to competitors, even when the company would increase prices every year. Apple keeps increasing prices every year and customers still want to buy them. This is due to the fact that Apple gives its customers a unique experience and good quality smartphones to keep them satisfied.

Hypothesis 5a assumed that increased price would change the way repeated purchases affect brand loyalty. As this hypothesis was tested, increased price had a low effect on this relationship.

Therefore, this hypothesis was rejected. Apple customers are familiar with high prices and are willing to pay more to obtain the product. As mentioned earlier, Apple customers did not care whether the price of the device will increase. These customers tend to have high loyalty and more likely to stay with the brand in the future. Apple is doing a good job meeting the needs of its customers as with this research, it can be seen that Apple could increase prices again and have the majority of their customers stay with the company.

Based on these explanations, the research questions stated in Chapter 1 were answered. **The first research question** was, “*What are the main behavioral drivers that influence the customers’ purchase decision of Apple products?*”. Based on the findings, it can be said the customers are changing their behavior and paying more attention to their personal factors to make the decision. They stated their lifestyle as their most important factor to make their BD, followed by the product quality and ease of use. The communication tools and words from friends, family and work colleagues are less important for the customers nowadays, as they want the product to represent their personal lifestyle and personality.

The **second research question** was, “*What is the relationship between repeated purchases and increased price of the product that leads to brand loyalty?*”. This research question asked about the post-purchase behavior of the customers. Based on the findings, there is a strong relationship between RI and BD. Once customers get familiar with the product, they are not willing to change the brand. This applied more to Apple customers as in every aspect, their loyalty for the brand is way higher than Android users. Apple customers value the connection with the device because of the impressive product experience provided by them. Asked specifically about their experience, Apple customers ranked personal selling in-store most. This shows the high commitment that Apple has to its customers.

The **sub-research question**, “*Does increased price and brand ecosystem have an impact on customer satisfaction and customer loyalty?*”, was linked with the previous research question. From the results, it can be said that increased price and brand ecosystem had an impact on CS and BL. However, this impact was low and not enough to make customers change their behavior about their product. No matter how far the price will go, Apple customers are going to buy the device and will not change to competitors. However, Android users were more affected by the price and showed a lower loyalty towards the brand.

The objectives of this thesis were linked to each other in different steps. Starting with the main objective on how customers maintain their satisfaction rate, it can be seen that Apple provides products with high quality, ease of use and what is very important, a unique experience on selling their smartphones. Moving to the next objective, price had a significant impact on their decision to buy a smartphone, however, when it comes to their loyalty, price did not change their behavior, which also represents the third objective that customers keep being loyal to the brand.

## **6 Conclusion**

In this work, the customer buying behavior was split between the pre-purchase behavior and post-purchase behavior and then, has been evaluated to see the whole process of the customer buying behavior. This chapter covers the limitations of this research and provides opportunities for future research. Lastly, based on the findings, recommendations of this research are provided.

### **6.1 Limitations and Future research**

This thesis elaborated the customer buying behavior of smartphones based on their pre-decision to buy the product and post-purchase behavior. Because of the complexity of the thesis, three main limitations were found.

First, even though there was plenty of literature about customer behavior, less literature was about the buying behavior of smartphones, which limited to the extension of the literature further. To fill that gap, a lot of journals and articles were reviewed to get more insights about the customer buying behavior of smartphones.

Second, the chosen methodology has some limitations. Because of the short time frame, the questionnaire needed to be closed earlier, and therefore, there were not enough respondents to give a more detailed explanation of this research. Moreover, respondents for this research were selected using snowball sampling, and therefore, full reliability of respondents cannot be guaranteed. Some of the surveys were not fully completed and limited a better analysis of the collected data.

Third, the place of the research was a limitation on its own. Even though the respondents were tried to be contacted throughout Switzerland, it is not guaranteed that the survey was completed in all areas of Switzerland.

However, all these limitations get along with the advantages of this research. Using a questionnaire allows a generalization of the findings to some extent and a greater objectivity, and validity of the results can be guaranteed due to this research design.

For future research concerning the field of customer behavior, it would be interesting to get different people from different cultures and do a focus group study to get more deep insights about their perception of customers on buying behavior of smartphones.

## 6.2 Recommendations

This research delivers a contribution to the field of customer buying behavior. Previous studies have dealt with analyzing, understanding and measuring customer buying behavior of various products and services. However, no previous studies have evaluated the whole process of buying behavior by looking at the pre-buying decision and the post-purchase evaluation of products. This was the main objective of this work and one of the first approaches trying to fill this gap. The results from the questionnaire showed new behavior of customers regarding buying smartphones. Based on that, customers nowadays are shifting their buying experience from traditional buying in asking opinions of other people, to a new approach of matching their buying decision on their personal lifestyle followed by good quality and product experience. From these results, possible recommendations arise that are applicable to smartphone companies.

The results derived from this research can help managers and marketers in many ways, including creating new marketing concepts in favor of customers, by trying to match the smartphone with different types of personalities. Without leaving in one side the quality attributes such as battery durability, ease of use, etc., companies should give more focus on providing customers with a unique experience with the product, since nowadays smartphones have a longer lifecycle and the more customers spend time with their smartphone, the more they get used to stick to it and create loyalty - which is also the end goal of most companies. In comparison to iOS and Android, it was seen that Apple customers have a higher loyalty towards the brand, and this is because Apple pays more attention to the customer needs, which is also the reason why Apple customers express such a high satisfaction rate.

Since the smartphone industry is increasing in competition every day, the smartphone providers must keep in mind the affordability to get the device. The usage of smartphone is coming near the usage of laptops for business and work purposes. Therefore, managers should consider every detail to make the operating system of the device compatible and easy to use in this dynamic environment. Customers are getting more used to the brand ecosystem and companies should consider providing them with products that price will not be one of the reasons that customers are switching to the competitors. Smartphones are the future of technology devices and their necessity will increase every day. Therefore, companies should focus on the new era of smartphones.



## List of References

- Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. New York : Toronto : New York: Free Press ; Maxwell Macmillan Canada ; Maxwell Macmillan International.
- Agyekum, C. K., Haifeng, H., & Agyeiwaa, A. (2015). *Consumer, Perception, Quality, Variables, Consumer behaviour*. 6.
- Ahamad, S. S., & Sekhar, N. D. C. (2014). *FAMILY MEMBERS ROLE IN PURCHASE DECISION MAKING*. 3, 27.
- Ahmad, A., & Thyagaraj, K. S. (2015). Understanding the Influence of Brand Personality on Consumer Behavior. *Journal of Advanced Management Science*, 38–43. <https://doi.org/10.12720/joams.3.1.38-43>
- Anastasia. (2018, January 27). Who are Opinion Leaders and Why do They Matter. Retrieved 26 June 2019, from Cleverism website: <https://www.cleverism.com/opinion-leaders-matter/>
- Ask, julie. (2018). Competing In Smartphones Demands More Than Great Hardware—You Need A Strong Ecosystem. Retrieved 18 July 2019, from Forbes website: <https://www.forbes.com/sites/forrester/2018/05/09/competing-in-smartphones-demands-more-than-great-hardware-you-need-a-strong-ecosystem/>
- Bashir, A., & Malik, N. (2010). Effects of Advertisement on Consumer Behavior of University Students Article. *Pakistan Journal of Business & Management (PJB)*, 13.
- Berry, T., & Wilson, D. (2019). Public Relations Marketing. Retrieved 24 June 2019, from Business Know-How website: <https://www.businessknowhow.com/marketing/prmarketing.htm>
- Bettencourt, L. A. (2017, August 23). How to Balance Style and Substance in Product Design. Retrieved 19 June 2019, from American Marketing Association website: <https://www.ama.org/2017/08/23/how-to-balance-style-and-substance-in-product-design/>
- Bhasin, H. (2018, May 29). What is Sales promotion and what are the types of sales promotions? Retrieved 24 June 2019, from Marketing91 website: <https://www.marketing91.com/what-is-sales-promotion/>
- Bindroo, V., He, X., & Echambadi, R. (2016). Satisfaction—Repurchase Intentions Relationship: Exploring the Contingent Roles of Consideration Set Size and Price Consciousness.

- Customer Needs and Solutions*, 3(3–4), 115–125. <https://doi.org/10.1007/s40547-016-0067-2>
- Bloemer, José M. M., & Kasper, H. D. P. (1995). The complex relationship between consumer satisfaction and brand loyalty. *Journal of Economic Psychology*, 16(2), 311–329. [https://doi.org/10.1016/0167-4870\(95\)00007-B](https://doi.org/10.1016/0167-4870(95)00007-B)
- Blythe, J. (2005). *Essentials of Marketing* (Third edition). Harlow: Pearson Education Limited.
- Briggs, F. (2016). Shoppers Prefer To Make Final Purchase Decisions In-Store, Despite Researching Online, Study Shows. Retrieved 20 June 2019, from Forbes website: <https://www.forbes.com/sites/fionabriggs/2016/07/06/shoppers-prefer-to-make-final-purchase-decisions-in-store-despite-researching-online-study-shows/>
- Burton, S., & Steane, P. (2004). *Surviving Your Thesis*. London: Routledge.
- Can, Y. (2017, December 20). *Brand Loyalty And Re-Purchase Intention In Smartphone Marketing: The Perspective Of Habit*. 39–48. <https://doi.org/10.15405/epsbs.2017.12.02.4>
- Can, Y., & Müceldili, B. (2018). *Determining Antecedent of Re-Purchase Intention: The Role of Perceived Value and Consumer's Interest Factor*. <https://doi.org/10.5539/ibr.v11n4p17>
- Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 65(2), 81–93.
- Chen, Y.-S., Chen, T.-J., & Lin, C.-C. (2016). The Analyses of Purchasing Decisions and Brand Loyalty for Smartphone Consumers. *Open Journal of Social Sciences*, 04(07), 108–116. <https://doi.org/10.4236/jss.2016.47018>
- Chi, D. H. K., Yeh, D. H. R., & Yang, Y. T. (2009). *The Impact of Brand Awareness on Consumer Purchase Intention: The Mediating Effect of Perceived Quality and Brand Loyalty*. 4(1), 10.
- Claessens, M. (2015, March 7). The Buyer Black Box – Buyer's Characteristics. Retrieved 26 June 2019, from Marketing-Insider website: <https://marketing-insider.eu/buyer-black-box/>
- Comcowich, W. (2017a, July 7). Apple's Winning PR Strategies: An Insider's View. Retrieved 24 June 2019, from Glean.info website: <https://glean.info/17954-2/>
- Comcowich, W. (2017b, November 6). The Genius of Apple's iPhone X Public Relations Strategy. Retrieved 24 June 2019, from Glean.info website: <https://glean.info/genius-apples-iphone-x-public-relations-strategy/>

- Cuofano, G. (2018, December 1). Apple Distribution: The Apple Store Is Not About Selling iPhones. Retrieved 20 June 2019, from FourWeekMBA website: <https://fourweekmba.com/apple-distribution-strategy/>
- Dahlgren, S. (2011). *Brand loyalty and involvement in different customer levels of a service concept brand* (Master). Aalto University, Finland.
- Dawson, T. (2019). Price Skimming: Definition, Pros and Cons, Strategy, and Examples. Retrieved 20 June 2019, from <https://www.priceintelligently.com/blog/bid/183669/ride-the-demand-curve-price-skimming-and-your-pricing-strategy>
- Deloitte. (2018). Smartphones are becoming the control centre of people's lives – only 8% of Swiss do not have one. Retrieved 10 August 2019, from Deloitte Switzerland website: <https://www2.deloitte.com/ch/en/pages/press-releases/articles/deloitte-in-switzerland-smartphones-become-control-centre.html>
- Dick, A. S., & Basu, K. (1994). Customer Loyalty: Toward an Integrated Conceptual Framework. *Journal of the Academy of Marketing Science*, 22(2), 99–113. <https://doi.org/10.1177/0092070394222001>
- Dolcourt, J. (2014). Why smartphone design matters (Smartphones Unlocked). Retrieved 19 June 2019, from CNET website: <https://www.cnet.com/news/why-smartphone-design-matters-smartphones-unlocked/>
- Dospinescu, N., & Florea, D. B. (2016). *SMARTPHONE BRANDS DESIGN AND BUYING DECISION*. 5, 13.
- Enberg, J. (2019). Global Digital Ad Spending 2019. Retrieved 22 June 2019, from EMarketer website: <https://www.emarketer.com/content/global-digital-ad-spending-2019>
- Explorable. (2009). Snowball Sampling. Retrieved 5 July 2019, from <https://explorable.com/snowball-sampling>
- Farfan, B. (2019). Where All of Apple's Retail Stores Are Around the Globe. Retrieved 20 June 2019, from The Balance Small Business website: <https://www.thebalancesmb.com/apple-retail-stores-global-locations-2892925>
- Fill, C., & Jamieson, B. (2014). Introduction to marketing communications. In *Marketing Communications* (First, p. 31). Great Britain: Edinburgh Business School.

- Gales, S. (2017, May 19). Smartphones need smart promotions to cut through the noise. Retrieved 24 June 2019, from Opia—The Market Leading Global Sales Promotion Consultancy website: <https://www.opia.com/smartphones-need-smart-promotions-cut-noise/>
- Galesic, M., & Bosnjak, M. (2009). Effects of Questionnaire Length on Participation and Indicators of Response Quality in a Web Survey. *The Public Opinion Quarterly*, 73(2), 349–360.
- Gallo, C. (2012). The Five Steps Apple Store Salespeople Take To Sell You An iPhone 5. Retrieved 25 June 2019, from Forbes website: <https://www.forbes.com/sites/carminegallo/2012/09/27/the-five-steps-apple-store-salespeople-take-to-sell-you-an-iphone-5/>
- Garun, N. (2018, November 1). Apple's price hike strategy is paying off. Retrieved 17 March 2019, from The Verge website: <https://www.theverge.com/2018/11/1/18053012/apple-q4-earnings-report-iphone-ipad-macbook-price-bump>
- Goi, C. L. (2009). *A Review of Marketing Mix: 4Ps or More? 1*.
- González, A. G., Herrador, M. Á., Asuero, A. G., & Sayago, A. (2006). The correlation coefficient attacks again. *Accreditation and Quality Assurance*, 11(5), 256–258. <https://doi.org/10.1007/s00769-006-0153-5>
- Greenspan, R. (2015, September 9). Apple Inc.'s Marketing Mix or 4Ps (An Analysis). Retrieved 20 June 2019, from Panmore Institute website: <http://panmore.com/apple-inc-marketing-mix-4ps>
- Guha, R. (2017). Smartphone: Point of sales techniques and word of mouth most important for smartphone purchase decision: IDC - The Economic Times. Retrieved 26 June 2019, from <https://economictimes.indiatimes.com/tech/hardware/point-of-sales-techniques-and-word-of-mouth-most-important-for-smartphone-purchase-decision-idc/articleshow/58591066.cms?from=mdr>
- Gupta, K., & Stewart, D. W. (1996). Customer satisfaction and customer behavior: The differential role of brand and category expectations. *Marketing Letters*, 7(3), 249–263. <https://doi.org/10.1007/BF00435741>
- Haider, T., & Shakib, S. (2018). A Study On The Influences of Advertisement On Consumer Buying Behavior. *Business Studies Journal*. Retrieved from

- <https://www.abacademies.org/articles/a-study-on-the-influences-of-advertisement-on-consumer-buying-behavior-7177.html>
- Hamza V.K. (2014). *CUMULATIVE APPROACH TO CUSOTMER SATISFACTION WITH RESPECT TO COMPACT SEGMENT CAR USERS*. COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY, India.
- Hanif, M., Hafeez, S., & Riaz, A. (2010). *Factors Affecting Customer Satisfaction*. (60), 9.
- Hawkins, D. I., & Mothersbaugh, D. L. (2016). *Consumer behavior: Building marketing strategy* (Thirteenth edition). New York, NY: McGraw-Hill Education.
- Hazelden, B. (2019). Importance of Advertising in Business. Retrieved 22 June 2019, from <https://smallbusiness.chron.com/importance-advertising-business-3260.html>
- Hessler, N. (2018, April 14). Apple's totally bizarre social media strategy that makes perfect sense. Retrieved 27 June 2019, from Medium website: [https://medium.com/@nick\\_hessler/apples-totally-bizarre-social-media-strategy-that-makes-perfect-sense-a10d050f4d46](https://medium.com/@nick_hessler/apples-totally-bizarre-social-media-strategy-that-makes-perfect-sense-a10d050f4d46)
- Hocking, B. M. (2013). *The Relationship between Personal Selling and Building Consumer Based Brand Equity: A Case Study on the Cookie Time Christmas Cookies Brand*.
- Holst, A. (2018). Topic: Smartphone industry analysis. Retrieved 10 August 2019, from Wwww.statista.com website: <https://www.statista.com/topics/840/smartphones/>
- Homburg, C., & Giering, A. (2001). Personal characteristics as moderators of the relationship between customer satisfaction and loyalty—An empirical analysis. *John Wiley & Sons, Inc, 18(1):43-66*, 24.
- Howard, C. (2016, September 19). Advantages and Disadvantages of Online Surveys. Retrieved 21 August 2019, from Cvent Blog website: <https://blog.cvent.com/events/advantages-disadvantages-online-surveys/>
- Ibzan, E., Balarabe, F., & Jakada, B. (2016). Consumer Satisfaction and Repurchase Intentions. *IISTE, 6, 5*.
- Indrayani, E., Siringoringo, H., & Saptariani, T. (2008). *IMPACT OF PRICE ON BRAND LOYALTY SENSITIVITY*. 9(2), 9.
- Jacoby, J., & Kyner, D. B. (1971). *Brand loyalty: A conceptual definition* [Data set]. <https://doi.org/10.1037/e611322012-087>

- Jobber, D., & Chadwick, F. (2016). *Principles and Practice of Marketing* (eighth edition). Berkshire: McGraw-Hill Education.
- Joseph, S. (2012). *Lifestyle – A Tool for Understanding Buyer Behavior*. 5, 283–298. *Int. Journal of Economics and Management*.
- Kabiraj, S., & Shanmugan, J. (2011). Development of a conceptual framework for brand loyalty: A Euro-Mediterranean perspective. *Journal of Brand Management*, 18(4–5), 285–299. <https://doi.org/10.1057/bm.2010.42>
- Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity* (4th ed). Boston: Pearson.
- Kelly, G. (2018). Apple Reveals iPhone X Hardware Fault And Repair Program. Retrieved 21 August 2019, from Forbes website: <https://www.forbes.com/sites/gordonkelly/2018/11/11/apple-warns-iphone-x-display-problem-upgrade-fix-repair-iphone-xs-max-xr-cost-warranty/>
- Khan, B. M. (2009). Consumers and Thier Brands: Deciphering Dimensions Of Loyalty. *Interational Journal of Business Insights & Transformation*, 2(1), 84–92.
- Kotler, P. (2002). *Marketing Management, Millenium Edition* (Tenth Edition). Pearson Higher Education.
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (Seventeenth edition). Hoboken: Pearson Higher Education.
- Kotler, P., & Keller, K. L. (2018). *Matketing Management, Global Edition* (fifteenth edition). Harlow: Pearson education limited.
- Kotler, P., Keller, K. L., Brady, M., Malcolm, G., & Hansen, T. (2016). *Marketing Management* (3rd edition). United Kingdom: Pearson Higher Education.
- Kuo, Y.-F., Wu, C.-M., & Deng, W.-J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, 25(4), 887–896. <https://doi.org/10.1016/j.chb.2009.03.003>
- Le News. (2018, May 14). Median Swiss salary rises. Retrieved 21 August 2019, from Le News website: <https://lenews.ch/2018/05/14/median-swiss-salary-rises/>
- Manik, N. (2017, August 30). Why after sales service is important for a smartphone manufacturer? Retrieved 19 June 2019, from The Mobile Indian website:

- <https://www.themobileindian.com/news/why-after-sale-service-is-important-for-a-smartphone-manufacturer-18664>
- Martin. (2014, August 5). Understanding the Marketing Mix Concept—4Ps. Retrieved 17 June 2019, from Cleverism website: <https://www.cleverism.com/understanding-marketing-mix-concept-4ps/>
- McCrum-Gardner, E. (2008). Which is the correct statistical test to use? *British Journal of Oral and Maxillofacial Surgery*, 46(1), 38–41. <https://doi.org/10.1016/j.bjoms.2007.09.002>
- Mehdi, M. M. (2015). Buying Behavioural Pattern Regarding Smartphone Users. *International Journal on Customer Relations*, 3(2). <https://doi.org/10.21863/ijcr/2015.3.2.011>
- Mjeda, T., Tomisa, M., & Kurecic, P. (2019). *IDENTIFYING THE RELATIVE INFLUENCE OF THE PRODUCT- RELATED ATTRIBUTES ON CONSUMER'S CHOICE*. 7.
- Mohd Puad, M. H., Yusof, A. R., & Sahak, S. Z. (2016). Smartphone Product Appearance: What Drive Consumers' Purchase Decision? In J. Pyeman, W. E. Wan Rashid, A. Hanif, S. J. A. N. Syed Mohamad, & P. L. Tan (Eds.), *Proceedings of the 1st AAGBS International Conference on Business Management 2014 (AiCoBM 2014)* (pp. 235–244). Springer Singapore.
- Mukerjee, K. (2018). The impact of brand experience, service quality and perceived value on word of mouth of retail bank customers: Investigating the mediating effect of loyalty. *Journal of Financial Services Marketing*, 23(1), 12–24. <https://doi.org/10.1057/s41264-018-0039-8>
- Mutinda, J. N. (2016). *RAND PERSONALITY AND CUSTOMER PURCHASE DECISION OF SMARTPHONE BY MASTERS' STUDENTS IN SELECTED PUBLIC* (Master). University of Kenyatta, Nairobi.
- Natarelli, M. (2017). The Smartphone Ecosystem. Retrieved 18 July 2019, from Lab website: <https://mblm.com/lab/stories/the-smartphone-ecosystem/>
- Oreilly. (n.d.). An Ecosystem of Connected Devices. Retrieved 22 July 2019, from <https://www.oreilly.com/library/view/designing-multi-device-experiences/9781449340391/ch01.html>
- Peter, J. P., & Olson, J. C. (2010). *Consumer behavior & marketing strategy* (9th ed). New York: McGraw-Hill Irwin.
- Pourian, M. J. T., & Bakhsh, M. M. (2015). *Loyalty: From Single-Stage Loyalty to four-Stage Loyalty*. 1(6), 4.

- Rather, R. A., Tehseen, S., Itoo, M. H., & Parrey, S. H. (2019). Customer brand identification, affective commitment, customer satisfaction, and brand trust as antecedents of customer behavioral intention of loyalty: An empirical study in the hospitality sector. *Journal of Global Scholars of Marketing Science*, 29(2), 196–217. <https://doi.org/10.1080/21639159.2019.1577694>
- Reddy, G. (2016). *Digital marketing impact on the consumer decision making process in Nike's customer retail operations in South Africa*. 108.
- Richter, F. (2019). Infographic: What Smartphone Buyers Really Want. Retrieved 19 June 2019, from Statista Infographics website: <https://www.statista.com/chart/5995/the-most-wanted-smartphone-features/>
- Rocco, T., & Plakhotnik, M. (2009). Literature Reviews, Conceptual Frameworks, and Theoretical Frameworks: Terms, Functions, and Distinctions. *Human Resource Development Review*, 8, 120–130. <https://doi.org/10.1177/1534484309332617>
- Said, H. (2014). Mobile Phone Brand Loyalty and Repurchase Intention. *European Journal of Business and Management*, 6, 69–73.
- Sanad, H. M. A.-. (2016). Impact of the Movable Word (Word-of-Mouth) on the Decision to Purchase of the Youth for the Smart Phones. *European Journal of Scientific Research*, 137, 246–258.
- Sata, M. (2013). *Consumer Buying Behavior of Mobile Phone Devices*.
- Satyendra. (2016). Product Quality and its Management – IspatGuru. Retrieved 18 June 2019, from <https://www.ispatguru.com/product-quality-and-its-management/>
- Scheuren, F. (2014). *What is a survey*. American Statistical Association (ASA).
- Schiffman, L. G., & Wisenblit, J. (2015). *Consumer behavior* (11. ed., global ed). Boston: Pearson.
- Schorah, K. (2002). The Role of Public Relations in the Marketing Mix. Retrieved 24 June 2019, from <https://www.bizcommunity.com/Article/196/18/575.html>
- Schultz, N., Zarnekow, D. R., & Berlin, T. (2011). The New Role of Developers in the Mobile Ecosystem: An Apple and Google Case Study. *T-Systems International GmbH*, 6.
- Sheth, K. (2017). All about the Cell Phone Industry. Retrieved 16 March 2019, from WorldAtlas website: <https://www.worldatlas.com/articles/all-about-the-cell-phone-industry.html>
- Silver, S. (2018). iPhone 7 Plus tops smartphone consumer satisfaction survey. Retrieved 16 March 2019, from AppleInsider website:



- <https://appleinsider.com/articles/18/05/23/iphone-7-plus-is-top-smartphone-in-consumer-satisfaction-survey>
- Singh, B. (2015). *Consumer Behaviour of Smartphone Users*. 03(07), 9.
- Slaughter, E. (2018, May 1). Product Attributes Require Thorough Management—CATSY. Retrieved 18 June 2019, from Product Experience Management website: <https://catsy.com/blog/manage-product-attributes/>
- Smith, D. (2019). Apple's price hikes have gone way too far. Retrieved 21 August 2019, from Business Insider website: <https://www.businessinsider.com/apple-price-hikes-2018-2018-12>
- Solomon, M. R. (2017). *Consumer behavior: Buying, having, and being* (Twelfth Edition). Boston: Pearson.
- Solomon, M. R., & Bamossy, G. J. (2016). *Consumer behaviour: A European perspective* (Sixth Edition). Harlow, England: Pearson.
- Spoonauer, M. (2019). 10 Reasons the iPhone Beats Android. Retrieved 19 June 2019, from Tom's Guide website: <https://www.tomsguide.com/us/iphone-is-better-than-android,news-21307.html>
- Suggett, P. (2019). 8 Major Media Tactics Used In Modern Advertising. Retrieved 22 June 2019, from The Balance Small Business website: <https://www.thebalancesmb.com/different-types-of-advertising-methods-38548>
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Thinktan. (2010, January 8). Putting PR in the Communications Mix. Retrieved 24 June 2019, from The Think Tank website: <https://www.thinktank.org.uk/news/11-putting-pr-in-the-communications-mix.php>
- Timothy, M. (2010). *Effectiveness of Pricing Strategies on Brand Loyalty Among Cell Phone Users in Ol-kalou Location in Kenya* (Master). University of Nairobi, Kenya.

- UK, E. (2018). Factors Affecting Purchase Of A Smart Phone. Retrieved 20 June 2019, from UKEssays.com website: <https://www.ukessays.com/essays/marketing/factors-affecting-consumers-to-purchase-a-smart-phone-marketing-essay.php>
- Vazifehdooost, H., & Hamedani, S. E. A. (2016). *The Role of Brand Personality in Consumer's Decision Making: A Review of the Literature*. 6(04), 15.
- Walia, P., & Singla, D. L. (2017). *Analysis of Factors Influencing Consumer Purchase Decision of Cellular Phones*. 5(07), 10.
- Yousif, R. O. (2016). The Impact of Personal Selling on the Purchasing Behavior towards Clothes: A Case Study on the Youth Category. *International Journal of Marketing Studies*, 8(5), 128. <https://doi.org/10.5539/ijms.v8n5p128>
- Zigu. (n.d.). Marketing Mix (4Ps) Definition Marketing Dictionary. Retrieved 17 June 2019, from MBA Skool-Study.Learn.Share. website: <https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/3956-marketing-mix.html>
- Zou, K. H., Tuncali, K., & Silverman, S. G. (2003). Correlation and Simple Linear Regression. *Radiology*, 227(3), 617–628. <https://doi.org/10.1148/radiol.2273011499>

**Annex: Questionnaire for the Data Collection**

Welcome!  
Hello and thank you for supporting me in my master thesis project on 'Customer buying behavior of smartphones'.  
Your contribution is vital to the perspective of customer into the buying behavior of the smartphone industry.

The survey takes about 5 minutes to complete and is anonymous.

Thank you for your support!  
Besfort Jasiqi

What is your gender?

Female

Male

What is your age?

Under 18

18-24

25-34

35-44

45+

Which type of smartphone are you using?

IOS (Apple iPhone)

Android (Samsung, Huawei etc.)

Do you use other products from the same brand?

Yes

No

What price are you more likely to pay when deciding to buy a smartphone? (Choose one)

Low Price

Average Price

Premium Price

Figure 14: Section I of the questionnaire (welcome part, gender, age, smartphone usage, and price)

How important were the following products attributes while deciding to buy the device?

	Not important	Slightly important	Somewhat important	Important	Very important
The quality of the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Product features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery durability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camera	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Product style and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Services provided after buying (Guarantee and after sales maintenance service)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication tools (advertising, promotions, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of the communication tools do you prefer from the smartphone provider?

- Advertising ( e.g. TV, radio etc)
- Personal selling in store ( from representatives of the company)
- Public relations (news stories, features, sponsorships, and events)
- Sales promotion (coupons, discounts)

Figure 15: Section II of the questionnaire (product attributes and communication tools)

When buying a smartphone, how important are each of the following to you?

	Not important	Slightly important	Somewhat important	Important	Very important
Word-of-mouth communication (personal words from trusted friends, associates etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opinion leader (people that can influence others because of special skills and knowledge)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online social networks (e.g Facebook, Instagram, Snapchat)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand personality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 16: Section II of the questionnaire (social and personal characteristics)

**\* Evaluate your satisfaction *after* buying the product.**

	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Product quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Product features	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Style and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camera	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery durability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guarantee and after sales maintenance service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Overall, how satisfied are you with the device that you purchased?

Very dissatisfied
Very satisfied

Is this the first time that you purchased a mobile device from this brand?

Yes

No

Figure 17: Section III of the questionnaire, satisfaction with the product

\* I will purchase the same brand again.

Very unlikely
  Likely  
 Unlikely
  Very likely  
 Neither likely nor unlikely

**Definition**  
 Mobile Ecosystem - "connected devices with same operating system (laptop, smartphone, watch, etc)."

\* How do you agree with the following statements as a customer?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My smartphone offered a good value for the money I paid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would switch to other competitors if they would offer similar but cheaper smartphones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the product because of the brand ecosystem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stick to the brand because of the brand ecosystem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would buy the brand even if the company increase prices <b>every year</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am loyal to the brand, I would recommend the product to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would buy the brand until the company increases prices from:

CHF 0-100  
 CHF 100-200  
 More than CHF 200  
 Price increase doesn't matter

Figure 18: Section IV of the questionnaire; repurchase intention and loyalty with the product

\* How much has your loyalty to the brand increased after purchasing the product **more than one time**?

0 (low) 100 (high)

\* How loyal are you to the brand you are using?

0 (low) 100 (high)

What changes would you want to see from the company in the future to keep you satisfied?  
Chose the **three** most important to you.

<input type="checkbox"/> Improve quality	<input type="checkbox"/> Improve security
<input type="checkbox"/> Change design & style	<input type="checkbox"/> Change marketing strategy
<input type="checkbox"/> Lower price	<input type="checkbox"/> Nothing at all
<input type="checkbox"/> Improve services	

Thank you for taking time to complete my survey  
For SurveyCircle users ([www.surveycircle.com](http://www.surveycircle.com)): The Survey Code is: 2V9Z-H4XS-2VK4-QG7Q

Figure 19: Section IV of the questionnaire; increased price and repurchase intention