Macromedia
University of Applied Sciences

BACHELOR THESIS

Final paper for the obtainment of the
Bachelor of Arts Degree

Gamification as an instrument for developing customer loyalty in highly competitive sectors

in the course of study Media Management
study focus Media and Communication Management

First examiner:
Prof. Dr. Philipp Riehm

Submitted by:
Louisa Grotkamp
Student ID number: H-33820
Course of study: Media Management
Study focus: Media and Communication Management

Hamburg, 02.02.2018

Acknowledgements

I would first like to thank Prof. Dr. Philipp Riehm for advising my bachelor thesis.
I would also like to thank all those who have supported me throughout the past months, in particular Linda Mundel, Jana and Tim Böhnke who proof-read and worked with me through the logic of this thesis.
Lastly, I express my sincerest gratitude to my family, Sabine, Jörg and Philipp Grotkamp, as well as Ingeburg Danne for your patience, never failing to believe in me, providing me with full support at any time, and for funding my studies.

Abstract

The concept of contemporary developments in the clothing e-commerce sector with respect to the use of gamification as an instrument to increase customer loyalty in highly competitive times is to be analyzed and assessed in further depth within this bachelor thesis. With the use of game elements in a non-gaming context, the method of gamification is currently being discussed as a universal mean of process optimization. By using the German e-commerce market in the segment of fashion for further references, this paper stresses how gamification may have a positive impact on customer loyalty within the online clothing sector.

Within this assessment, it is emphasized that games, which are reportedly gaining prominence, have an increasingly strong influence on individuals when implemented as a gamified application and leading individuals to feel more attached to a brand or company. This leads to the examination of the theoretical motivation observation of gamification, as well as the examination of one's motivation to play. Various levels of loyalty are discussed and the extent to which customer loyalty plays a more important role to companies than the acquisition of new customers is addressed.

With the help of a conducted online survey, further information about people's receptiveness towards gamified applications and incentives is retrieved and thus delivers proof that gamified applications influence buying behavior but only if financial incentives are involved. Moreover, it shows that more effort needs to be invested in familiarizing people with gamification before actually realizing applications due to a lack of awareness. Finally, the research findings result in the assessment whether gamified applications can be seen as unnecessary.

Table of contents

Key terms

Gamification

Gamified applications

Application

E-commerce

Key words

Online shopping

Clothing

Games

Playing

Loyalty

List of figures

List of tables

List of abbreviation

TRA = Theory of Reasoned Action

TPB = Theory of Planned Behavior

USP = Unique Selling Point

UI = User Interface

UX = User Experience

i.e. = id est

e.g. = exempli gratia

etc. = et cetera

cf. = confer

n/a = no answer

approx. = approximately

p. = page

H1 = hypothesis one

H2 = hypothesis two

1. Introduction

Highly competitive markets can aggravate customer acquisition. Promoting customer loyalty is, therefore, becoming more important. A long-known method to promote such loyalty is loyalty programs but during the age of gaming mechanisms, where the video game market exceeded a turnover of 100 billion dollars in 2017 and the aggregate turnover for 2019 is expected to be 119 billion euro (Grimm, 2017), loyalty programs are reinvented using gamification.

According to Stampfl (2012), gamification is the transfer of game-typical elements and processes into non-game-related contexts with the goal of behavioral change and increasing the motivation of users. However, gamification should be distanced from games and serious games.

This work aims to identify the possibility of using gamification as an instrument for increasing customer loyalty within the clothing e-commerce sector. E-commerce in the sector of clothing is one of the highest-grossing markets in Germany. In 2015, the clothing segment held a big lead over other segments with a total revenue of 10.016 million euro (Bundesverband E-Commerce und Versandhandel Deutschland e.V., 2016). It stands to reason that it is a highly competitive business. Considering both factors, the competitive market, as well as the rising popularity of games, it is to be assessed to what extent gamification has a positive impact on customer loyalty within the clothing e-commerce sector. Finally, possible implementation suggestions are discussed.

1.1. Relevance and aim of the thesis

Two industries are of high interest for this bachelor thesis. Having said this, one delivers background information about a rising trend, while the other market is closely looked at as an exemplary case. The first industry is the video game market, which increased by twenty-six times in the past twenty years (Grimm, 2017). The world's largest producer for mobile games records 2.8 million app downloads a day and in 2016, mobile game providers made a revenue of 36.9 billion dollars (ibid.). The second industry, which is taken as an exemplary industry for the assessment of the research question is the e-commerce sector. Digital shopping also shows significant changes, as more customers shop online. According to Ecommerce Foundation (2016), the turnover between 2004 and 2013 has more than tripled from 13 billion euro to 47 billion euro and was expected to reach a growth rate of 12% in 2016. In 2015, Germany was ranked the second largest online market behind the United Kingdom (A.T. Kearney, Inc., 2015). Also, 62.9 million people in Germany had access to the Internet and the number of e-shoppers reached 73% of Germany's population with 51.6 million people,

which resulted in the e-commerce share of the Gross Domestic Product (GDP) to reach 1.97% (Ecommerce Foundation, 2016). In conclusion, it can be said that Germany, as one of the largest e-commerce markets in Europe, is highly competitive and as retailers are facing increased competition, pursuing consumer loyalty becomes highly important. In order to compete with the competition, retailers need to identify the key cause that leads to customer loyalty. When trying to build a relationship between the retailer and customers, various methods, such as satisfaction and the benefits that are being delivered to the customer, may play into favor. However, the methods used by companies to keep their customers should add value to their life in order to bind them to the company.

A tool that has been around for some time and does not originate from the gaming industry but shows a slight connection to it is still in the early stages within business usage and is gaining considerable importance as it may increase customer loyalty. This tool, which uses elements that resemble games is further discussed and looked into during this assessment. It could be of high relevance for companies and online clothing companies in particular and is called gamification.

The aim of this work is therefore to investigate the effect of gamification on customer loyalty and to uncover potential for improvement through the use of gamification in the clothing e-commerce sector.

1.2. Description of the methodology

A clear structure divides the assessment into a background part, an empirical research part, and a concluding part. The background part shall be structured as a literature review on theoretical backgrounds regarding the structure of games before it enlarges upon the human behavior connected to games. The examination of motivation and motives to play games shall be of central importance within that chapter. In order to determine the importance of customer loyalty within the concept of using gamification as an instrument to increase customer loyalty, an analysis of customer loyalty and the meaning of customer acquisition for companies are of considerable importance and need to be examined within the first part of the thesis.

The second part, the empirical research chapter, includes a collection of data in form of a conducted survey which shall give further insights on the research question, as well as hypotheses that arose during the first chapter. Finally, the third and last part of the bachelor thesis concludes the findings of both, the first and second part, and uses the results to form a future outlook on the topic for companies within the fashion e-commerce sector.

2. Background

The following sections impart profound background information about the topic of gamification and its related topic areas. Here, the information is listed regarding its importance for the topic of my bachelor thesis and therefore starts with gamification and related concepts, followed by motivation studies and lastly focuses on buying behavior of the target market.

2.1. Classification of gamification

In the following, basic terms are defined. The creation of such a unified system of terms shall serve a better understanding of this work and avoid misunderstandings. However, not only the individual concept complexes and their relationships are clarified, but also their scope of meaning is differentiated from other topics so that the examination of this work is clearly defined.

2.1.1. Definition

The term gamification has its origins in the digital media industry where it was first used in 2008 but was not further disseminated until 2010 (Mitzscherling, 2015). Ever since, there have been various definitions for the term and literati have interpreted it in multiple ways (Deterding et al., 2011a). Parallel terms of the word gamification, such as “productivity games”, “surveillance entertainment”, “funware”, “playful design”, “behavioral games” and “game layer” exist and continue to arise, yet “gamification” seems to be the common household term (Deterding et al., 2011a, p.1). Many attempts to define the concept of gamification derive from corporate practice and are non-suitable to explain the general concept. Thus, definitions such as the “adoption of game technology and game design methods outside of the games industry” (Helgason, 2010, par.1) or “the process of game-thinking and game mechanics to engage users and solve problems” (Zichermann & Cunningham, 2011, p. xiv) were proposed. However, one definition of academic nature seems to be the widest-spread as it is pointed out multiple times within the concept of gamification and is the definition of Deterding et al. (2011a), which states that “gamification is the use of game design elements in non-game contexts” (p.2). In order to understand how Deterding et al. were able to come up with the definition and to get a more detailed understanding, it demands a closer look at the concepts and research of Human Computer Interaction (HCI) and game studies.

2.1.2. Related concepts and their distinction

Only a distinct classification of the definition of gamification shows how it positions itself among comparable and existing disciplines, such as games, the activity to play and

serious games. Thus, it needs to be investigated how gamification stands in relation to precursors and similar concepts (Deterding et al., 2011a).

Gamification relates to games, not the activity to play (Salen & Zimmerman, 2010). In fact, playing is conceived in form of a game free from or without strict rules (Deterding et al., 2011a). Regarding the common definition of a game, it has very defined game rules with a distinct system of rules, promoting competition and an integrated system of feedback (Mitzscherling, 2015). Further, games are characterized by the voluntary participation of players (Deterding et al., 2011a).

The distinction of games and the activity to play is a concept framed by Caillois who differentiates between ludus and paidia (Mitzscherling, 2015). Caillois documented the differences between the activity of playing and the game itself in the context of the game industry (ibid.) and came up with the concept that games and playing are two opposite poles that are called ludus and paidia (Caillois, 2001). Ludus is a word of Latin origin and can be translated as “game”, while paidia, a word of Greek origin, translates into “play” (Mitzscherling, 2015; Jensen, 2013). According to Jensen (2013), there is a constant movement between the two poles, as paidia unavoidably alters into ludus and ludus can also transform back into paidia. Caillois’ distinction between ludus and paidia, however, has received less research attention in Human Computer Interaction because the differentiation solely focused on the design (Deterding et al., 2011a). Thus, McGonigal (2011), further suggested adopting a new term, gamefulness, as a systematic addition to playfulness. The term playfulness is well known in the research of the gaming industry as it describes the desired user experiences and how they can be designed (Mitzscherling, 2015). Accordingly, while playfulness refers to the experimental characteristics of playing, gamefulness indicates the qualities and characteristics of a game (ibid.). It is the counterpart of playfulness, because while playfulness categorizes gamers' gaming experiences and provides appropriate design recommendations, gamefulness does not seek to understand the activity of playing but games themselves in terms of their user experiences and designs (ibid.). According to Deterding et al. (2011a), gamification has more in common with gamefulness than playfulness and should therefore be “analytically distinguished from playfulness or playful design” (p.3). In conclusion, it can be said that gamification arises through the strategic usage of game design elements but only as long as the goal of gameful design is to follow the idea of gamefulness (Mitzscherling, 2015).

Serious games, on the other hand, represent a subcategory of games. Unlike games, serious games do not only pursue the purpose of entertainment and are not only played for the purpose of playing but for the purpose of educating the player while playing (Ritterfeld et al., 2009). The topic that the user is being educated about depends on the respective product and may extend one’s knowledge on various different subjects.

However, they are different than gamified applications that also pursue another purpose than playing and are therefore further looked at within this thesis.

2.2. Composition of gamification

As stated above, gamification is somehow related to gaming but still stands as an independent concept that should be clearly distinguished from games, gamefulness and playfulness. In order to identify the concept of gamification and how it is different to games, games need to be intensely looked at. For that reason, the composition of gamification is looked at in further detail, including the examination of the intention of games and gamified applications, linked topic areas and the connection between humans and games.

2.2.1. Intention of games and gamified applications

In order to get a holistic overview on what gamification is about and related to, gamified applications and games need to be distinguished. According to Mitzscherling (2015), games have an entertaining intention and are only played for the purpose of playing, not for other reasons. Gamified applications may also follow entertaining purposes; however, they do not exist within the concept of a game (ibid.). Gamified applications are therefore applying game elements but within another context than games, which focuses on the real world, rather than the virtual world (ibid.). As gamified applications do not exclude the user experiencing entertainment and joy, which is characteristic for games, the distinction of gamified applications and games should be extended. Furthermore, as there aren't fundamental differences between the purposes of games and gamified applications, they may be distinguished regarding their different contexts, meaning games pursuing the purpose of amusement and gamified applications being conceivable in various contexts that are different from games, but which may also include the purpose of amusement as one component (Deterding et al., 2011a).

Examples for these various contexts of gamified applications are the Starbucks Reward Program, the Nike+ Fuel Band or CryptoKitties. The Starbucks Reward Program is a function of the Starbucks Card or within the Starbucks application where people accumulate stars when purchasing products at Starbucks (Starbucks Corporation, 2018). The more stars have been collected, the higher the buyer gets ranked and thus, receives better incentives (ibid.). Here, the activity of purchasing something at Starbucks is implemented using game design elements.

The Nike+ Fuel Band is an accessory that tracks the owner's movements, which are synchronized with an application (Chip Digital GmbH, 2013). Within the application, the user gets ranked among other users (ibid.). Here, the activity of exercising is implemented using game design elements.

The last example are so-called CryptoKitties, which serve to give people a better understanding of cryptocurrencies and the blockchain of ethereum by implementing the activity of investing in cryptocurrencies in a playful way using cats as game design elements (Kühl, 2017). The idea behind CryptoKitties is the following: cats symbolize the value of the cryptocurrency ether that people can invest in (ibid.). Users can, therefore, buy, sell or mate cats that each have a value in ether and are unique in its features (ibid.).

Regardless of whether amusement is implemented as a purpose or a component, it is present within both, games and gamified application.

2.2.2. Linked topic areas

In addition, according to Deterding et al. (2011b), gamification should not be reduced to digital technologies, even though the majority of past cases were of digital nature. Deterding et al. (2011b) further state that "not only are media convergence and ubiquitous computing increasingly voiding a meaningful distinction between digital and non-digital artifacts, but games and game design are transmedial categories themselves" (p.2).

Moreover, it needs to be defined which elements are distinctive for gamification, as Deterding et al. (2011a) believe that one element alone, such as a rule or the aim of the game, does not represent a game but the composition of various elements does. According to Mitzscherling (2015), it should be proposed to consider elements not as a requirement, but as possible components, which resembles Wittgenstein's' theory that elements used in gamification should be a collection of the most-used elements that are typical for games (Wittgenstein, 2009). Deterding et al. (2011a) propose that "for the purposes of terminological and conceptual clarity, it is more helpful to reserve the term gamification for the use of game design, not game-based technologies or practices" (p.4). Furthermore, game design elements can be divided into five levels, whereas not all five levels may be used simultaneously in order to maintain a clear distinction to serious games. While gamified applications contain the application of game elements for other reasons than amusement, serious games refer to the use of games with all their typical characteristics (Deterding et al., 2011a). Ritterfeld et al. (2009) further define digital serious games as

> "any form of interactive computer-based game software for one or multiple players to be used on any platform and that has been developed with the intention to be more than entertainment" (p.6)

In the following, five levels of design elements for gamification composed by Deterding et al. are introduced. The first level is called interface design patterns, which appear in form of rankings or levels and is an established design component and solution used in arising interaction problems (Crumlish & Malone, 2009). Second, there are the game design patterns and game mechanics (Deterding et al., 2011a). They refer to limited

resources, a turn within the game or a possible entrance into a competition. As these events and mechanisms may happen repeatedly, they affect the process of application (ibid.). Third, design principles and heuristics are so-called guidelines that help solving design problems and analyze design solutions, e.g. a clearly defined objective, the possibility to experience an implementation in different ways or to further use an implementation with no restrictions (Schaffer, 2008). The fourth level are conceptual models of game design units (Deterding et al., 2011a). These include game design atoms that help game designers understand the interaction of the whole game through small, individual parts of the game (Brathwaite & Schreiber, 2009). The fifth and last element are the game design methods, which are processes and practices such as playcentric design and playtesting (Fullerton, 2008). Playcentric design means involving players into the design process and playtesting means testing the game after the design process (ibid.).

Deterding et al. argue that at least one level needs to be used in order to receive a gamified application, however, multiple experts from corporate practice criticize that statement (Mitzscherling, 2015). Their kind of argumentation goes under the name of pontification, which states that one level, such as interface design patterns, is not enough to create a gamified application (ibid.). According to the experts from corporate practice, gamified applications are connected to intrinsic motivation while for example interface design patterns can only enable extrinsic motivation (ibid.).

The difference between intrinsic and extrinsic motivation has been pointed out by Levesque (2014) as

> "intrinsic motivation is based on an individual's natural interest in an activity, an interest that motivates them to engage eagerly and willingly in that activity. […] Extrinsic motivation, on the other hand, involves external motivating factors, such as financial gain or some form of recognition (an award or good grades)" (p.1478).

This topic will be touched upon in further detail within a later chapter.

Summing up these findings, it can be said that the differentiation of gamified applications and other concepts go even further. It should therefore not only be distinguished between games and playing but also between the application of the whole characteristics of a game and the sole application of elements (ibid.). Playful interactions include playful designs, toys, and pervasive games, which are game formats that connect the environment with virtual elements. Such game formats include location-based games, augmented reality games, persistent games and alternate reality games (Deterding et al., 2011a).

2.2.3. The connection between humans and games

Within the following chapter, the connection between games and humans will be further analyzed. It aims to identify what kind of value games have on human beings. Consequently, three different areas of value shall be proposed.

The first area of value is of evolutionary nature with a focus on human's biology. According to Stampfl (2012), playing is part of the human evolution and it has an equal effect on learning and memory performances, stress management, and other aspects of life, such as sleeping and dreaming. Playing games may even enhance different aspects of cognition, as found out by Oei & Patterson (2013). Oei and Patterson conducted a game training study and found out that playing different games one hour a day may lead to improved cognitive control, multiple object tracking, visual search performance, spatial working memory and verbal span. Also, games can have an evolutionary function as they can help living beings deal with existential fear (Stampfl, 2012). Martha Nussbaum (2007) goes even further and includes playing into her capability approach, a list that includes ten central human capabilities a human being needs in order to not be limited in its existence.

The second area of value derives from a social and historical meaning of the game. The meaning of games in relation to humans has been found in literary records. Schiller (2013) declares that man only plays when in the full meaning of the word he is a man, and he is only completely a man when he plays. The history of playing, therefore, seems to be as old as human history as it passes epochs and cultural environments. According to Huizinga (1949), "play is older than culture, for culture, however inadequately defined, always presupposes human society […]" (p.1). Huizinga (1949) adds that playing differentiates itself from the ordinary life location and duration wise, as it is played with the limitation of time and place.

The third and last proposed area of value is the meaning of games in relation to a learning process. The theory that some people might find it easier to learn within a scope of a game has not only been formulated within theory but is being implemented in a various range of subjects. Examples are vocabulary trainer in form of computer games or knowledge games such as the application "Quizduell", which trains common knowledge within a competitive context. Yet, in order to reach a high learning curve, games cannot be designed in a way that they become boring fast or that the goal to learn is impossible to reach. The Flow model, a theory that is graphically documented by Csikszentmihalyi (1990) is described in further detail in a later section of this bachelor thesis but explains how optimal experience is achieved. It also gives insights on how games work in relation to learning as the learning process heightens with rising skills. However, if something is not challenging, humans tend to be bored. In order to maintain the flow, which is the "state in which people are so involved in an activity that

nothing else seems to matter […]" (Csikszentmihalyi, 1990, p.4), a game would, therefore, have to challenge someone equally intense as it would have to be doable.
Based on these insights and having identified the fact that gamification uses game elements from various angles it should be considered whether gamified applications should focus on purposes that are similar to people's interests when targeting users. As amusement and the context of applications are very prominent factors, the first hypothesis of this research paper is deduced:
H1: People who are receptive for playing games are likely to be receptive for entertaining gamified applications.

2.3. Theoretical motivation observation

Within the following chapter, the concept of motivation is closely looked at. Before putting the focus on motivational research, the topic is reasoned by starting to identify the fun factors and value of gaming to better understand people's motivation and attitude.

2.3.1. Fun factors and value of gaming

An important factor for game designers when designing games is the fun factor. It adds value to a game and automatically heightens the chances that the game may be perceived in a positive way. Defining fun factors, however, is hardly possible because there is no precise proof what may work and what not. Nevertheless, there are factors that can add fun to a game and are therefore presented and discussed in the following.
Playing games such as video games is often believed to be conceptualized as a socially isolating activity. Notwithstanding, it can be an increasingly social activity that eases and encourages interacting on- and offline with either existing or new friends (Kaye & Bryce, 2012). Examples of such games that encourage to engage with others are "Quizduell" or "Farmville", which belong to the category of social networking games. Another experimental and motivational factor in a variety of gaming contexts is competitiveness. Being challenged can motivate someone to win against the other player and winning can make people feel happy. Though, it should be noted that the balance between cooperative and competitive gaming remains unclear because a high competitiveness does not necessarily lead to positive feedback, but may result in frustration or aggression (Anderson & Morrow, 1995).
Lim & Lee (2009) examined how social contexts affect physiological arousal and found out that the physiological arousal between conditions of solo and collaborative gameplay showed significant differences (Kaye & Bryce, 2012). It can, therefore, be said that the differences between competitive and cooperate gameplay decide or influence the outcome of the game.
In her book, Schell (2008) presents a list of human pleasures that may be considered when designing a game. Again, not all of them apply to gamified applications so the

two that may be connected to a gamified application within the clothing e-commerce sector will be further discussed. One example for such pleasure is anticipation. According to Schell (2008), waiting for a pleasure to come is pleasant itself. In the context of clothing e-commerce, it could mean that waiting for a sale to happen is pleasant because one gets excited for the moment to happen. Another pleasure that applies to shopping as well is having possibilities. Having many choices and knowing that any of those choices can be picked is highly pleasant (ibid.) If, for instance, multiple items are on sale and cost the same, buyers have many possibilities to choose from, which arouses them.

Schell (2008) proceeds to name key components necessary to create an activity of value for a player. Games need to have clear goals. If that is given, players are more easily able to stay focused on completing whatever task is required by a game (Schell, 2008). Further, there should not be any distractions, because they can steal focus from the task and no focus means having no flow (ibid). The third key component is direct feedback. If players have to wait to see what effect their previous action may have, they are more likely to lose focus and become distracted (ibid.). Having immediate feedback can easily help one stay focused (ibid.). Lastly, continuous challenges keep us interested, whereas it should be kept in mind that challenges should not be too easy or too hard because, as previously mentioned, the player will most likely get bored or frustrated.

2.3.2. Motivational research

Playing games and participating in gamified applications has a lot to do with motivation. Without motivation, humans would not be able or perform activities the way they would if being motivated. Hence, the theory of motivation and its background is to be further analyzed. One of the most well-known and multiple tested theories to declare that the inherent structure of games is associated with the experience of flow and enjoyment during gaming is the “Flow Theory” by Csikszentmihalyi (Mitzscherling, 2015). Through conducted surveys, Csikszentmihalyi found characteristics that make an activity attractive in a way that it is continuously being repeated. According to Csikszentmihalyi, the activity itself is the reason why it is being conducted, not necessarily the endeavor and is therefore autotelic (ibid.). According to Rheinberg (2006), autotelic motivation is another word for intrinsic motivation but Mitzscherling (2015) explains that autotelic is a very distinct form of intrinsic motivation that creates a balance between mental over and underload, called flow.

Flow means to be completely absorbed and to fully open up in an activity in which, despite full capacity utilization, the feeling remains to have the whole course of events under control (Csikszentmihalyi & Csikszentmihalyi, 1992). A flow experience comes with different conditioning components that occur in every achievement-related situa-

tion even though the activity is not being conducted to achieve a final outcome but for the incentive of the activity (Mitzscherling, 2015). Csikszentmihalyi suggests eight conditioning components that lead to a flow experience. The first component says that the activity represents an autotelic motivation (Mitzscherling, 2015). The second component implies that an activity needs to have high requirements but it should still be possible to overcome (ibid.). Only if the balance between ability and requirement was to be assured on a high level and it would result in efficiency, a flow experience occurs. According to Mitzscherling (2015), the second component is the most important one. Third, the activity needs to stress the person in an ideal way but through high requirements, the feeling of having everything under control remains (ibid.). Not having to reflect on an activity is component number four and elaborates that the activities should be designed to accomplish clearly formulated objectives and that immediate feedback takes place (ibid.). Fifthly, concentration that deliberately takes place is not necessary in order to reach a flow situation. Csikszentmihalyi (1997) adds,

> "when we are in flow, we are not happy, because to experience happiness we must focus on our inner states, and that would take away attention from the task at hand" (p. 32)

Sixthly, experiencing time is to be blinded out (Mitzscherling, 2015). Seventhly, merging into an activity is to be perceived as if the activity and one's self coalesces. Thus, a feeling of affection arises (ibid.). The final conditioning component leading to a flow experience is subsequent from the previous point as the affection leads to an identification with the activity, which again leads to a loss of perception for the environment. The procedure, however, runs smoothly and is not being noticed as one action smoothly leads to the next (ibid.).

Csikszentmihalyi illustrated his flow theory with the help of a model (see figure 1).

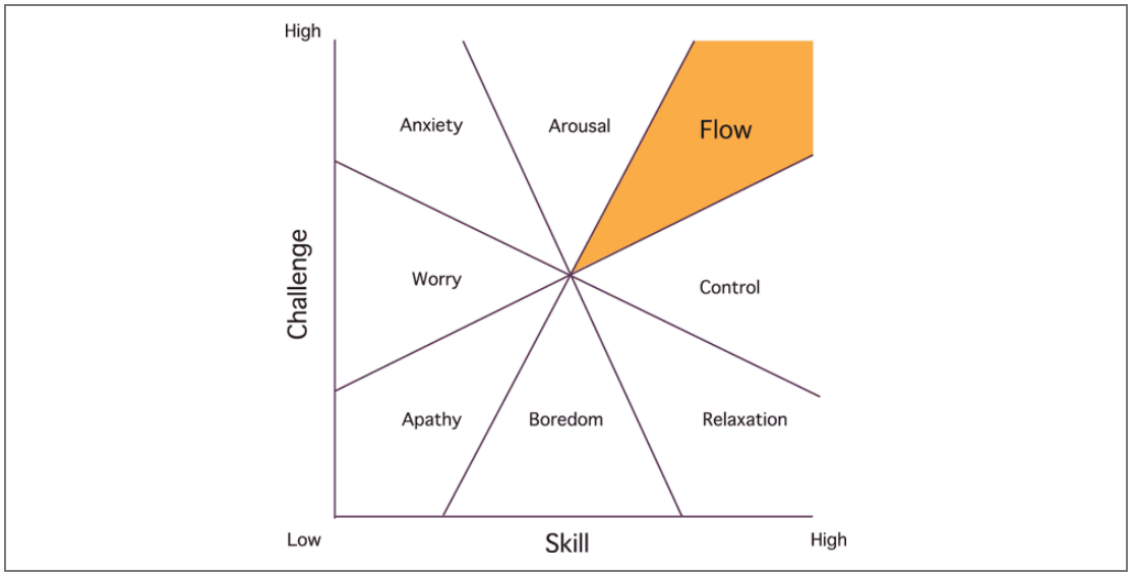

Figure 1. Flow Model. Reprinted from Alicia Caswell (2013), par.7

The model represents “the quality of experience as a function of the relationship between challenges and skills. Optimal experience, or flow, occurs when both variables are high” (Csikszentmihalyi, 1997, p. 31). It also indicates why flow leads to personal growth. The area marked “arousal” for instance stands for a condition in which humans feel involved, active and mentally focused but at the same time, it can lead to feeling weak, apathetic or out of control (Csikszentmihalyi, 1997). By learning new skills, humans can return to a more enjoyable flow state from the state of arousal (see figure 1). Same applies to the state of “control”, which can have positive effects, such as feeling happy, strong or satisfied, but can also be linked to less positive feelings, such as the lack of concentration, involvement, and the feeling to be in control (ibid.). Increasing challenges can in this particular case result in a returned state of flow (see figure 1). Csikszentmihalyi (1997) designates arousal and control as highly important states for learning and explains that the other conditions, such as “anxiety” or “worry” are “less favorable” (p.33). Because they are too far away from the flow state and their set of skills is very low, humans could retreat to less challenging situations rather than trying to manage high challenges (see figure 1). Reaching the flow state, the synonym for an ideal situation would expect humans to be constantly growing while they enjoy what they are doing (Csikszentmihalyi, 1997). How often people experience flow depends on themselves and if they are willing to accept that mild convergences of the ideal condition can be counted as instances of flow (ibid.). However, it can be said that people are more likely to experience flow when they are doing their favorite activity, rather than conducting “passive leisure activities” (Csikszentmihalyi, 1997, p. 33f).

When it comes to moving up the flow channel, Jesse Schell has a remark that should be looked at in more detail. Moving up the flow channel exponentially, meaning challenges and the set of skills rise equally is considered the ideal case (Schell, 2008). That way, one does not have to fear anxiety or boredom. Though, it should be considered whether an experience that follows a flow as it is shown in figure 2 might be the more desired approach for a game (ibid.).

Figure 2 shows a repeating cycle of increasing challenges followed by a reward that leads to an easier period with fewer challenges before the challenge rises again (ibid.). The cycle that Schell (2008) calls “tense and release, tense and release […] seems to be inherent to human enjoyment” (p.122). According to Schell (2008), fluctuating between the two components leads to both feelings, excitement, and relaxation, which offers both pleasure of anticipation and pleasure of variety.

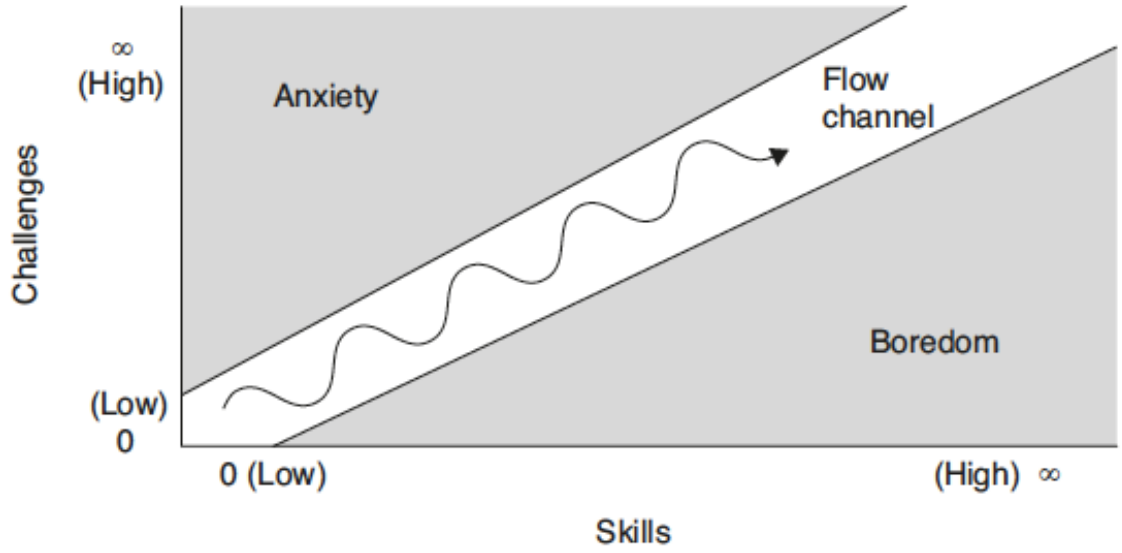

Figure 2. Flow Channel. Reprinted from Jesse Schell (2008), p.121

When applying this onto a gamified application of an online shop the application would have to be a challenge followed by a reward. This could mean that the customer completes a challenging game sequence or that the challenge is to collect loyalty points and the following reward could be a discount.

Experiencing flow can motivate a person in a way that he or she is motivated to redo the activity again and again (Mitzscherling, 2015). Applying this onto a gamified application within the clothing e-commerce sector, it could mean that if the retailer manages to keep the buyer within the flow channel when the buyer uses the gamified application it may result in the customer being motivated to return to the online shop. By implication, a returning customer may mean another purchase.

The flow theory, therefore, seems to be an appropriate method to pursue the question, whether gamified applications have the ability to encourage and motivate a user to use the application.

However, the flow theory does not clarify how motivational influencing factors are connected with the path, which is also adjacent to the behavior of users and ultimately also to customer loyalty. By following this pathway, the theoretical and conceptual foundations will be outlined, which will be used within this bachelor thesis to further investigate the extent to which gamified applications can be viewed as a tool for increasing customer loyalty in the fashion e-commerce sector.

Hence, we come to the conclusion, that an attitude research needs to be conducted to further understand the behavior that is on the one hand in charge for leading a person to use gamified applications, which can later result in a possible growth in customer loyalty and on the other hand is needed to identify how a person may be led to the decision of wanting to try something, such as using gamified applications of a fashion online retailer.

2.3.3. Attitude research

According to Blut (2008), the central construct within behavioral science is represented by the attitude. Fishbein and Ajzen (1975) generally understand this as a "learned predisposition to respond to any object in a consistently favorable or unfavorable way" (p.6). As Blut (2008) indicates that behavior is controlled by attitude and loyalty is a form of behavior, different perspectives on attitude studies are looked at within this chapter.

One of the most wide-spread models in attitude research is the three-component model by Rosenberg and Hovland (Mitzscherling, 2015). According to Rosenberg and Hovland, attitude is conceptualized as a construct composed of three components, a cognitive (beliefs), an affective (feeling) and a conative (behavior) one (ibid.). The cognitive component comprises all views or opinions based on the information, the knowledge and the thoughts of the individual with regard to the subject matter of the adjustment (Blut, 2008). In contrast, the affective component is the emotional response, meaning the positive or negative rating of the object (ibid.). The conative component includes the willingness to behave in a particular way towards the attitude object (Blut, 2008). The three-component model of attitudes is based on the assumption of a general consistency between the individual's thinking, feeling and acting (ibid.).

Continuing the theoretical construct of attitude, Ajzen & Fishbein (1980) formed a new concept called the “theory of reasoned action” (TRA) that redesigns the construct of the attitude solely on the basis of the affective component. They explain "an attitude toward any concept is simply a person’s general feeling of favorableness or unfavorableness for that concept" (Ajzen & Fishbein, 1980, p.54). The component of cognition is thus put first while the component of conation is put last (see figure 3).

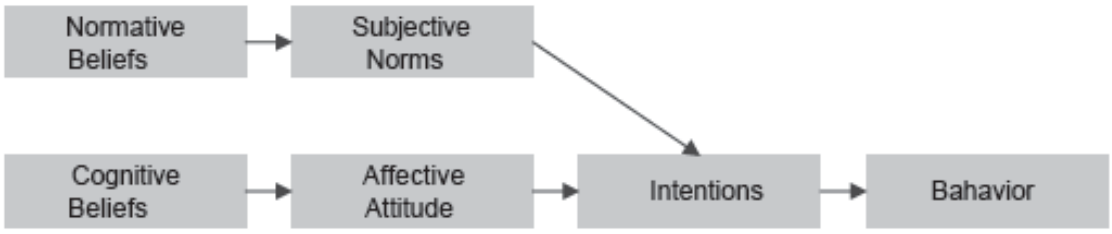

Figure 3. Theory of Reasoned Action (TRA). Following Blut (2008), p.49

By doing this, Fishbein and Ajzen distinguish between views, attitudes, social norms and intentions, which collectively act as a final consequence on a behavior regarding a reference object (Fishbein & Ajzen, 1975). Even though Fishbein & Ajzen’s concept relies on the attitude towards an action, the TRA can be extended to explain the attitude towards an object (Gotlieb, Grewal & Brown, 1994) and could, therefore, give fur-

ther insights on the influencing factors for using a gamified application within the clothing e-commerce sector.

The TRA is based on the assumption that the behavioral intention is explained by the attitude of a person and their subjective norms. According to TRA, the conative component is thus influenced by the affective component and the attitude of an individual towards an object can, in that case, be positive or negative (Mitzscherling, 2015). This assessment depends on whether an individual believes that the achievement of a particular behavior will lead to positive or negative consequences. However, intentions are not only influenced by the attitude but also by subjective norms. The subjective norms concern how individuals perceive their relevant and social environment (ibid.). This perception has an effect on an individual deciding for or against certain behavior. The subjective norms and attitudes are influenced by the normative views and cognitive views of a person (ibid). The motivating influencing factors are taken up by the intention via the attitude and the subjective norms, which is why the intention can be understood as the motivation of an individual (ibid.). Ajzen (1991) explains,

> "as a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance. It should be clear, however, that a behavioral intention can find expression in behavior only if the behavior in question is under volitional control, i.e., if the person can decide at will to perform or not perform the behavior" (p. 181f.)

The logic is applicable to multiple life situations. An example could be if a person acquired a boating certificate and had to take the written test at the end of the sailing course, chances of the individual being motivated to study are higher if the course had been attended out of their own free will and motivation to learn how to sail. Applying this onto a gamified application within the clothing e-commerce sector, customers would have to participate in the application out of their own free will and not because they are obliged to. This could mean that instead of constraining the buyer to participate in order to proceed their shopping activity, the application would have to be an optional function within the app or on the website where customers can go to if they chose to participate. Studies reflecting upon the TRA argue that there are more factors than just a positive intention to influence behavior. As individuals are not always in control of their behavior, not every intention leads to actual behavior (Mitzscherling, 2015).

For that reason, Ajzen (1991) came up with another theory called "theory of planned behavior" (TPB) that clarifies conscious behavior.

The TPB is an extension to the TRA "made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control" (Ajzen, 1991, p.181). It contains a new determinant called perceived behavioral control (see figure 4).

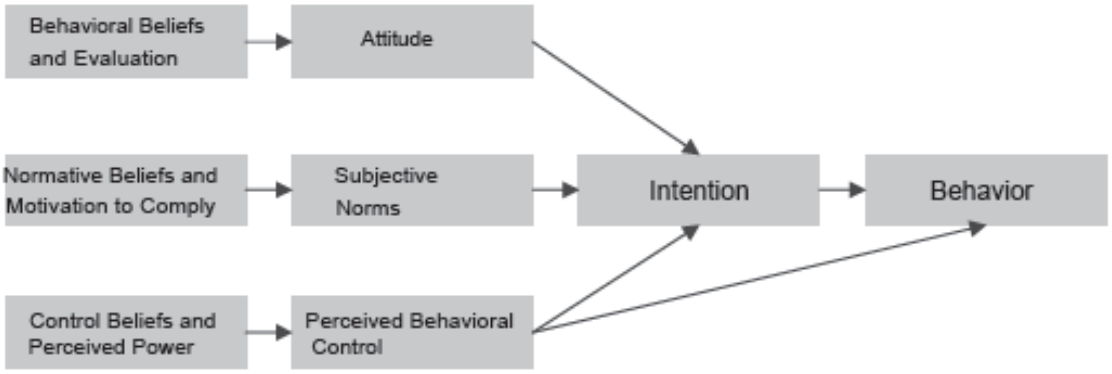

Figure 4. Theory of Planned Behavior. Following Blut (2008), p. 51

The construct of behavioral control discusses intentions and behavior, even if the choices made were of partly conscious nature (Mitzscherling, 2015). When defining behavioral control, Ajzen (1991) refers to “Bandura’s […] concept of perceived self-efficacy which is concerned with judgments of how well one can execute courses of action required to deal with prospective situations” (p. 184). He proceeds that

> “investigations have shown that people’s behavior is strongly influenced by their confidence in their ability to perform it (i.e., by perceived behavioral control). Self-efficacy beliefs can influence choice of activities, preparation for an activity, effort expended during performance, as well as thought patterns and emotional reactions” (p.184).

Thus, behavioral control is a person's conviction as to whether they find it easy or difficult to successfully perform an action (Mitzscherling, 2015). It can, therefore, be said that the intention of behavior is an exclusive measure which predicts whether an individual will try to realize an action or not (ibid.). Applying this onto a gamified application within the clothing e-commerce sector, the application would have to be designed in a way that the customer feels the incentive is easily attainable or at least not impossible to obtain.

According to Ajzen’s theory of planned behavior, behavioral achievement can be predicted using perceived behavioral control and behavioral intention (Ajzen, 1991). A reason for expecting a direct link between behavioral achievement and perceived behavioral control is if the intention is held constant, the effort used to reach a behavioral process to a successful conclusion is more “likely to increase with perceived behavioral control” (Ajzen, 1991, p.184). An example for that would be if two people tried to learn how to skateboard and one of them was more confident about mastering the activity, that person is more likely to succeed.

The TPB is a trusted model of behavioral science, which examines effects of attitude, subjective norms and perceived behavioral control in respect of behavioral intention or motivation (Mitzscherling, 2015). According to Mitzscherling (2015), TPB clarifies that

there is a difference between behavioral intention and an actual behavior and points out the theoretical foundation to explain customer loyalty. Based on the theory of planned behavior, the connection between attitude research and customer loyalty research can be further explained.

2.4. Target market behavior

Before customer loyalty research will be further touched upon, the behavior of customers is stressed. Customers are a crucial factor to companies because without demand there would not be supply. When it comes to customers, companies have among others two important tasks. The first task is to acquire new customers and the second one is to keep them. Keeping customers assumes that customers are loyal to an enterprise. Why customer loyalty is of high importance and sometimes even more important than acquiring new customer is to be assessed within this chapter.

2.4.1. Definitions

The terms customer acquisition, customer loyalty and e-loyalty are defined and their meanings are further confronted to get a better understanding of the value of retention compared to acquisition.

2.4.1.1 Customer acquisition

Simply put, customer acquisition means to gain new customers and involves persuading consumers to pay for a company's products or services (WebFinance Inc., 2017). The cost of customer acquisition is a highly important measure to companies and organizations when evaluating the value that each customer brings to the business (ibid.). According to Galetto (2017), it

> "refers to the set of methodologies and systems for managing customer prospects and inquiries that are generated by a variety of marketing techniques. Some […] include customer referrals, customer loyalty programs, and the like. One way to think about customer acquisition management is to consider it the link between advertising and customer relationship management, as it is the critical connection that facilitates the acquisition of targeted customers in an effective way" (p.1).

2.4.1.2 Customer loyalty

Customer loyalty can be explained as repeated purchase behavior from existing customers (Srinivasan, Anderson & Ponnavolu, 2002). According to Srinivasan et al. (2002), George H. Brown classified loyalty into four categories based on consumer buying patterns. The four categories consist of undivided loyalty, divided loyalty, unstable loyalty, and no loyalty at all (ibid.). Later evaluations then measured customer loyal-

ty solely by the possibility of re-purchases (ibid.). Following the research question of this bachelor thesis, three proposals for definitions are particularly interesting.

First, some researchers claimed that a behavioral definition is inadequate because it should be distinguished between true loyalty and spurious loyalty, which arises if a customer lacks alternative products or services (Srinivasan et al., 2002). An example of spurious loyalty is when a person plans to purchase a specific pair of shoes but ends up buying the shoes from the competitive online shop. This may result from the initial online shop not having the shoes in stock or offering them for a higher price.

Following this criticism, we come to the second proposal, coming from Engel & Blackwell. In their opinion, brand loyalty does not have to be tied to only one brand within a product category but can mean the loyalty to one or more brands over a certain period of time (ibid.). Applied onto the case of clothing online shops, it means that a customer may be loyal to two or more clothing online shops because together they offer everything the individual might need or wishes for.

The final proposal comes from Assael (1992), who sees brand loyalty as a positive attitude towards a brand. This positive attitude results in a consistency of purchases over time (ibid.). This explanation has also been supported by Keller (1993) who advocates that favorable attitudes towards a brand that are evinced in repeated buying behavior show loyalty.

2.4.1.3 E-loyalty

Srinivasan et al. (2002) specify customer loyalty even further and define e-loyalty, which is the favorable attitude towards e-retailers. As this bachelor thesis focusses precisely on gamified applications within the clothing e-commerce sector, which includes e-retailers, the causes for e-loyalty will be further touched upon. Based on conducted interviews, Srinivasan et al. (2002) came up with eight factors that seem to impact e-loyalty. These factors are “(1) customization, (2) contact interactivity, (3) cultivation, (4) care, (5) community, (6) choice, (7) convenience, and (8) character” (Srinivasan et al., 2002, p. 42).

Customization, as the word already says, means that an online retailer is capable to tailor the products or services offered to the needs of the customer. Customization, however, comes in many different ways. The most common one is to detect the customers’ social demographics in order to offer specific ranges of products that fit the customer (Srinivasan et al., 2002). Customization heightens the chances of customers finding something that they are looking for or like. An exemplary case is the German online shop ABOUT YOU that promotes their online shop with the slogan “It’s About You” (ABOUT YOU, 2017). The online shop offers customers to create a profile within the online shop providing information about their style and preferences when it comes to clothing. According to that information, the online shop then filters their product

range so that the customer gets offered products that match their description. It speeds up the process of finding something suitable. The longer it takes to browse through the product range and the more items a customer sees that they do not like, the higher the chances of the customer exiting the online shop or as Khan (1998) proposes, it drives customers “to resort to simplistic decision rules” in order to narrow down their choice as quickly as possible (p.48). According to a survey by NetSmart Reasearch, 83% of web surfers admitted getting confused or frustrated when having to navigate sites (Srinivasan et al., 2002). Consequently, customization reduces frustration and heightens e-loyalty. Shostack (1977) further proposed that customers perceive the range of choice as bigger than it is because it primarily shows them what is relevant to them. Customization, in general, leads to more appropriate matches between the customer and product or services, which builds a base for a successful purchase (Srinivasan et al., 2002). All in all, it makes a shopping experience more convenient, enjoyable and appealing, which can lead to reoccurring customer visits.

Contact interactivity are the dynamics between an online retailer and their customers through the website or app. Interacting with customers is reported to be highly important and of high significance to customer loyalty (ibid.). A lack of interactivity, such as missing information about certain products or services, difficult navigation or delayed responses from the customer care make communicating with customers difficult (ibid.). The reason why contact interactivity has a big impact on e-loyalty has been explained by Alba et al. (1997) and implies that it enables the search process that eases finding desired products or services. Customers, therefore, do not have to keep a detailed memory anymore. Also, it increases the information that can be presented to a customer (Srinivasan et al., 2002). An exemplary case is the international online giant Amazon, which provides multiple information about the products. This information does not only include the product description but the reviews about the product written by past customers or the recommendation of products that previous customers have bought as well when purchasing that specific item. By providing extra information, retailers become more than just a place to shop at, but a place where consumers can gain and add to their repository of knowledge (ibid.). Lastly, contact interactivity facilitates the navigational process, which increases the autonomy of decision and level of control experienced by the customer (ibid.).

The third factor to influence and heighten customer e-loyalty is cultivation. It stands for the extent to which a retailer provides information and incentives to the customers to extent their buying over time (ibid.). If retailers offer interesting content and incentives to customers, they are more likely to come back. A common example for such incentive is a discount code or a special promotion where customers can save money. Reaching out to existing customers via mail is inexpensive and can persuade them along the way

to purchase again (ibid.). These cycles of stimuli enhance a retailer's knowledge base regarding their customers and can further be implemented to enhance customization and contact activity (ibid.). The factor of cultivation can be easily implemented within gamified applications as the said incentives could be the reward that customers get when taking part in the application.

Next up is care, which stands for the attention paid to pre- and post-purchase behavior of customers (ibid.). It provides retailers with further knowledge that can be used to improve future transactions or customer relationships. Taking ABOUT YOU as a practical example again, the online shop sends out coupon codes to customers so that they return to the online shop. Customers that previously spent quite a high amount but haven't returned in a while receive a coupon code worth more than a person who spent only a little amount. For online retailers, ensuring that everything runs smoothly, preventing breakdowns or being able to deal with them fast is of very high importance. Poleretzky emphasizes the importance of word of mouth within the Internet (ibid.). In the physical world, unhappy customers can and will tell people around them about their discontent. On the Internet, however, negative feedback reaches many more people in only a short period of time and, because people online have instant access to the competition of a company, they might switch to a competing retailer (ibid.). Hence, the care that a company puts into their operations can reduce disturbances and heightens e-loyalty. Also, in this case, using game elements can play a role. An example for a practical implementation within a clothing online shop could look like as follows: instead of sending coupon codes to customers in order to make them return to the online shop, the gamified application could send a notification to the customer that higher financial incentives can be acquired as a reward for their loyalty.

Community comes fifth and is self-explanatory for the formation of potential and existing customers that a retailer organizes and manages to impart the exchange of opinions and information regarding products or services rendered by a retailer (Srinivasan et al., 2002). An example for that is a chat room sponsored by a retailer, where people can exchange their views about the retailer. One of the reasons why these communities increase e-loyalty is because they tremendously facilitate word-of-mouth. Customers value recommendations and opinions of other buyers, which can be seen on Amazon. According to the comments below higher rated products, more people end up buying it due to its evaluation. By providing the informational exchange regarding products or services, a retailer can increase customer loyalty. In particular, some customers may remain loyal because they enjoy giving feedback, while other people value other customers' contributions (ibid.). Further, customers may start to feel they are part of a community. According to Bhattacharya, Rao, & Glynn (1995), social identification is "the perception of belonging to a group with the result that a person identifies with that

group" (p.47). When customers start to identify themselves with the community created by a retailer, it can develop a strong and especially lasting bond, which equals customer loyalty (Srinivasan et al., 2002). This factor can again be implemented using a gamified application. If customers can interact with other people within the application, they may start to feel like being part of a community. Examples for such interactions could be similar to the Nike+ Fuel Band where customers could be ranked among others or similar to the CryptoKitties example where customers could interact with one another to achieve something together, such as reaching higher levels jointly.

The next factor is choice and can be explained by using Amazon as an example. Stationary retailers are limited in their range of products. The number of products offered depends on various factors such as the size of the shop, rent, et cetera. An online retailer does not have these kinds of limitations and can go even further by forming alliances with other vendors to offer a broader spectrum of products (ibid.). The motivation to connect businesses derive from the customer's wish not to deal with multiple suppliers. Amazon, therefore, connected with a large number of vendors, which offers customers to shop from a big variety of products from different ranges while the customer does not have to switch between online shops. The greater the choice, the more dominant a shop seems, and it ultimately becomes a destination for one-stop shopping (ibid.).

The seventh factor, convenience, has a lot to do with User Interface Design (UI) and User Experience Design (UX) because it refers to the extent to which a customer thinks a website is user friendly, intuitive and simple (ibid.). According to Eric Schaffer, 30% of consumers leaving a website before purchasing anything do so because they weren't able to navigate through the website (ibid.). He further argued that a website needs to provide short response times, fast completion of transactions and minimize the customers' effort in order to be convenient (ibid.). If an online shop is convenient it makes the shopping experience more satisfying and hence heightens customer e-loyalty (ibid.).

The eighth and final factor that increases e-loyalty is character. Due to the lack of human interaction, websites can be a very impersonal and boring space (Srinivasan et al., 2002). It is therefore even more important that retailers create websites that represent a character. Character in this case can be defined as an "overall image or personality that the e-retailer projects to consumers through the use of inputs such as text, style, graphics, colors, logos, and slogans or themes on the website" (Srinivasan et al., 2002, p.44). Henderson & Cote (19918) note that graphic symbols can even evoke associations with shopper attitudes towards a retailer. If a customer, therefore, associates a positive attitude towards an online shop, they are likely to return to the shop. Hence, e-loyalty increases.

2.4.2. Customer acquisition vs. customer retention

Customer acquisition and customer loyalty are both important topics to companies. However, customer loyalty seems to be of even higher importance to companies than customer acquisition because it accelerates profitable growth (Myler, 2016). According to Myler (2016), single-deal customers are of less value to a company than long-term customers and keeping a customer is less expensive than it is to acquire a new one. In fact, “acquiring a new customer is anywhere from five to 25 times more expensive than retaining an existing one” (Gallo, 2014, p.1). The reason is simple because it requires much more endeavor and assets to go and find a new customer than making sure the existing one stays satisfied and content. A research done by Fred Reichheld (2001) shows that a 5% increase in customer retention results in more than 25% increased profit. Customer retention can impact growth even further because existing customers are allegedly more open to new products. More precisely, 50% of existing customers are more likely to try new products and spend 31% more money compared to new customers (Saleh, 2017). Further, the probability to sell to an existing customer is 60-70%, while the probability to sell to new customers is between 5 - 20% (ibid.).

In conclusion, a company should consider the customers that they wish to serve before they start acquiring customers. The overall goal, however, should be to acquire customers that provide value to the company before the company focuses on retaining them (ibid.).

2.4.3. Customer retention research

Customer retention research makes use of psychological and social attachment concepts of behavioral science research and thus bases its argumentation on the popular concept of attitude (Mitzscherling, 2015). In the following chapter, customer loyalty is explained using Oliver's four-stage loyalty model, which describes loyalty as a process consisting of four successive phases (see figure 5) (Blut et al., 2007). Following the order of their dependence, the phases are cognitive, affective, conative, and action loyalty. Following Ajzen's TPB, Oliver distinguishes the successive phases of the four-stages loyalty model separately and outlines the relationships between the individual components (Mitzscherling, 2015).

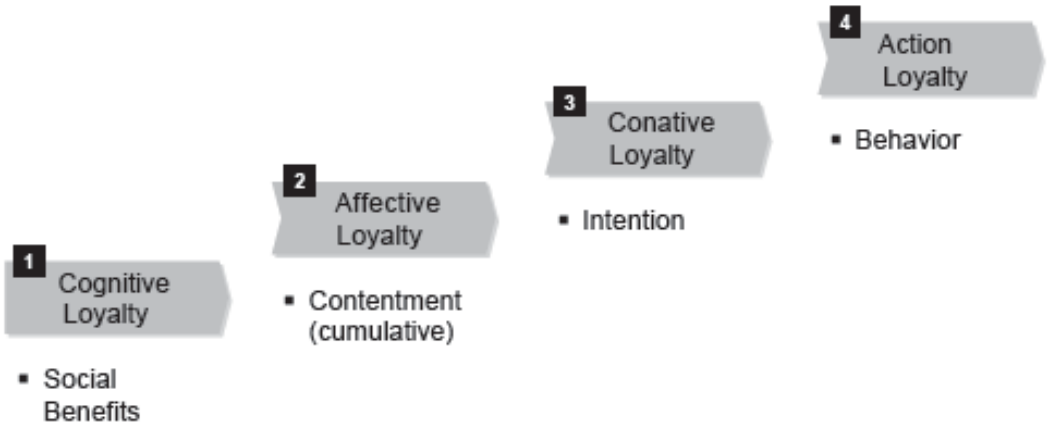

Figure 5. The four-stage loyalty model. Following Blut (2008), p.62

According to Braunstein (2001), cognitive and affective loyalty represent a determinant rather than a dimension of the conative loyalty. The action loyalty concerns the consequences of conative loyalty, meaning customer retention (ibid.). Different factors exist on each stage of the model that have an influence on the next stage. In addition, according to Blut (2008), the higher the stages, the higher the loyalty of each customer towards a company. In the following, all four stages will be further defined.

The weakest type of loyalty and therefore the first stage is cognitive loyalty. Cognitive loyalty is determined by relevant information regarding the offer such as price, quality et cetera (Blut et al., 2007). This stage is solely directed at the costs and benefits of an offer and not at the brand itself (ibid.). Chances that customers change to competitive companies who have alternative offers are, therefore, higher because the cost-benefit ratio dominates in these situations (Sivakumar & Raj, 1997). As a consequence, this leads to the second hypothesis of this research paper.

H2: People who are price sensitive are less likely to be loyal.

To make a point, cognitive loyalty depends on the customer's response to an offer, in particular to the perceived performance of an offer in relation to its price, which equals its value (Blut et al., 2007).

The second stage, affective loyalty, applies when a positive attitude towards a retailer or an object has been developed (Mitzscherling, 2015). Depending on the performance of the cognitive component, the global affect evaluation, which is satisfaction can be measured (ibid.). One's expectations are, therefore, balanced against the output and yield the level of contentment. Because affective loyalty is dependent on uncertain factors such as price, it is subject to changes.

Conative loyalty is the third loyalty stage and implies that loyalty can only be accompanied by a desire (Blut et al., 2007). An example would be if an individual wished to repurchase a specific brand, they might come back and shop with a retailer again. If the desire for a new product does not exist, the individual may not return for further purchases. Notwithstanding, conative loyalty is subject to change as well. If for instance, the delivery period is quite high, conative loyalty is reduced because the previous two factors are not perceived in a positive way. As a result, customers may change to a competitive online shop.

The last factor is action loyalty. Studies regarding this stage of loyalty imply that not all intentions lead to an actual action (ibid.). The first three loyalty stages lead to a readiness to act, such as buying. A successful completion of a purchase, however, only happens if the consumer is willing to search for the best offer despite the effort needed to do so (ibid.). Having said that, offers from competitors do not count as alternatives (ibid).

In summary, it can be stated that according to the model, the concept of customer loyalty can be understood as a superordinate overall structure under which the individual levels of loyalty intertwine in a network of effects (Mitzscherling, 2015). Further, Blut (2008) came up with three requirements that need to apply in order to achieve high customer loyalty. The first factor is that “the brand information held by the consumer (i.e. the consumer’s beliefs) must point to the focal brand as being superior to what is known of competitive offerings” (Blut, 2008, p.62). Second, “the consumer’s degree of liking must be higher than that for other offerings, so that a clear affective preference exists for the focal brand” (Blut, 2008, p.62). The third and last factor implies that “the consumer must intend to buy the focal brand, as opposed to the alternative brands, when purchase decision arises” (Blut, 2008, p.62).

Summing up the factors and requirements needed for heightening loyalty it can be said that gamification should add value to the customer’s life but because loyalty can be heavily influenced by price if it is a decisive factor when shopping it can be difficult to achieve loyalty if people are price sensitive.

3. Empirical research

The assumed positive influence of gamified applications on customer loyalty within the online fashion industry is empirically investigated in this research paper. A quantitative survey method was chosen in order to test the research question and hypotheses deduced from chapter two of this bachelor thesis. The said survey method used for this purpose is an online survey. In the following, the selected research method is explained in detail and the necessary operationalization of the considered variables is carried out. Further, the structure of the survey is presented, followed by a critical re-

flection of the analysis including limitations of the empirical research method. Subsequently, the methods used for evaluating the data are explained and the research results are presented in great detail. This aims to obtain a positive or negative outcome of the research question, answering the hypotheses.

3.1. Methods

As previously stated, a quantitative research method or an online survey to be more precise has been chosen as the empirical research method. The choice is based on multiple factors that are presented in the following.

This research paper investigates peoples' attitude towards the implementation of gamified applications. As it focusses on the online retail industry, the people who this research is directed to are viewed as potential customers. The challenge is, therefore, to find out what people think of gamification from a customer's point of view. Consequently, an expert interview was not an option as it would have only provided the opinion of outsiders who try to analyze and evaluate the shopping behavior of individuals. A content analysis as a method for conducting research is also not suitable. It cannot adequately attain information about peoples' attitude or motivation towards online shopping and the implementation of gamified applications within the clothing e-commerce sector. It is, therefore, safe to say that customers need to be included in the research to gather information at first-hand. Thus, a survey which is able to gather people's own opinion has been chosen as the most suitable method to receive insights about the attitude and motivation of customers to use gamified applications. An online survey is a standardized type of survey, meaning that its questions are defined in the minutest detail and that the order of questions has been precisely determined (Gäser & Laudel, 2010). Participants can read and answer the questions on their own, which is called "self-administered questionnaire" (Bryman, 2016, p.220) and it eases the work of the person creating the survey. Also, standardized types of surveys reflect a constant condition, which has a positive effect on the reliability of the results. In addition, an online survey is a cheap method that collects much data in a short period of time as it can be distributed to large audiences in a minimum of time through social media and digital communication channels.

3.1.1. Data acquisition

The survey was distributed within Germany so that environmental disturbances, such as a different understanding of buying or loyalty due to cultural and financial differences were kept constant. The chosen research style was the field experiment in which the participants take part in familiar surroundings. The advantage of this experimental research design is that it increases the internal validity of the study (Pepels, 2014, p. 147). However, a common disadvantage of an experimental research design is that it

usually creates an artificial situation for the participants (Berekoven et al., 2009), which may lead to subjects attempting to consciously provide answers that are compliant with expectations (Brosius & Koschel, 2003). However, the fact that the online survey takes place in the natural environment of the participants and at any convenient time for them, the circumstance can be positively counteracted (Reips, 2002). Embedding the experiment in an online survey also has the advantage of being able to automatically capture subjective perceptions and sensations of a large sample in a quick and cost-effective manner and compare them based on the standardized design of the questionnaire (Meffert et al., 2015). Attitude and behavior are oftentimes measured through observation (Pepels, 2014), but since within the scope of this research only behavior intention shall be measured, which is not clearly observable and, therefore, need to be estimated by the propositi, the survey is used as an appropriate research method.

3.1.2. Aim of the survey

Having discussed the choice of an empirical research, it needs to be decided on what the survey aims to find out. The main intention is to test the research question and both hypotheses (see table 1).

Topics to be tested	
Research question	Does gamification have a positive impact on customer loyalty within the clothing e-commerce sector?
H1	People who are receptive for playing games are likely to be receptive for entertaining gamified applications.
H2	People who are price sensitive are less likely to be loyal.

Table 1. Overview of topics to be tested

Source: own depiction

After determining the main intention, it can be formulated which additional information can be derived from the research. In case of this survey, gathering more knowledge about the role of gamified applications and the use of game mechanics to enable customer loyalty and engagement with online retailers is hoped to be collected. Further, the level of loyalty towards online shops is of significant interest. In terms of gamification, collecting information about people's knowledge about the topic is aimed for. Finally, finding out data about the connection between customers and games is also desired.

3.1.3. Methodological approach

Conducting a survey includes more than designing and distributing a survey. A highly important part of the conceptualization is to test the survey for its reliability et cetera. Within the following section, the importance and implementation of the testing phase

and reliability test are presented. Further, the study structure is explained in the minutest detail including its motifs to better understand the thoughts behind each question and the order of the questionnaire. Lastly, information about the sample period, as well as the distribution channels is given.

Testing phase and reliability test

According to Hunt, Sparkman & Wilcox (1982), the process of developing a questionnaire consists of seven steps, including (1) determining what kind of information is wanted, (2) choosing the right administering method and type of questionnaire, (3) specifying the matter of content of every question, (4) deciding for a form of response for each question, (5) deciding on the number and order of questions, (6) reviewing the first five steps and finally (7) pre-testing the questionnaire and editing it before it is ready to be published. Pre-tests or so-called pilot studies refer to “mini versions of a full-scale study […], as well as the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule” (van Teijlingen & Hundley, 2002, p. 33). It is a central aspect when designing a good study and heightens the likelihood of success but does not guarantee it (van Teijlingen & Hundley, 2002).

In order to check the quality of the items, functionality, and length of the online survey, a pre-test with eight participants was carried out before starting the field survey. The choice of participants was based on heterogeneity of the group in terms of prior knowledge of the questionnaire, profession, age, and gender. In retrospect, the results of the pre-test resulted in minor adjustments of the questionnaire, which were mainly due to linguistic reasons and concerned the introductory part but also the visuals that served a better understanding. Before publishing the official survey, the questionnaire was revised according to the comments made. However, extensive structural changes or changes concerning the understanding were not necessary.

Study structure

The online survey was programmed and published using the online survey tool "Survey Online". In order to keep the drop-out rate as low as possible, participants were shown a progress bar throughout the survey that illustrates how close a participant is to finishing it. Furthermore, during the development of the questionnaire, explicit attention was paid to designing the survey in a way that the processing time was relatively short and that the questionnaire structure was kept compact. Since the topic of gamification is quite new and not widely communicated, the priority apart from gathering the answers needed in order to answer the research question was to keep the drop-out rate low.

This was being done doing the following: after clicking on the survey link, the propositi were led to the first page of the survey, which was an introductory slide (see figure 16).

This included a greeting alongside the most important and relevant information regarding the survey (e.g. background and aim of the survey, as well as an assurance that the collected data were handled appropriately and confidentially). Furthermore, it was mentioned that the duration of the survey would not exceed three minutes and an email address was provided in case of comments, questions or feedback. The following parts of the survey were divided into seven pages, examining various topics that correlate and, in the end, form a base for answering the research question, as well as the hypotheses.

The second page concerned the overall topic of the bachelor thesis. An introduction into the topic was given, providing both, the scientific definition from Deterding et al. and a self-simplified definition (see figure 17). The simplified interpretation served to give the feeling of the survey not being too sophisticated and challenging. Afterwards, two examples were provided that came with a visual to clarify even further what gamified applications can look like and what purpose they pursue (see figure 17). A note saying that this survey solely focused on the usage of digital gamified applications was further noted in a separate sentence (see figure 17). It was followed by two questions addressing the level of awareness for gamification and gamified applications (see figure 18). These two questions were arranged on the same page as the definition and visual. The idea behind this arrangement was that participants had the chance to scroll up to be remembered what gamification was about when answering questions regarding one's knowledge about it and prior usage of gamified applications. The reason to find out peoples knowledge about the topic has a lot to do with the future prospect of gamified applications. If people are highly educated on a topic there does not have to be much time and effort put into familiarizing it with potential customers. It can also give insight into whether the market is ready for its implementation. Topics, products, and services that are new and not widely communicated or known need time to be accepted before they can enter the market. Oftentimes, projects fail because by the time they are launched, consumers are not ready in terms of being educated on it or there is simply no need for it (Hall, 2014).

The third page concerns games, gaming apps, and its usage. As gaming is a very prominent subject of the topic and to test the first hypothesis, a short text comprising two sentences explained the significance of games and its implementation in form of gaming apps (see figure 19). The participants were then asked to answer two questions. The first question tested the general usage of gaming apps and the second question specified the topic asking how many gaming apps are downloaded onto the participants' cellular device (see figure 19). The answer possibilities comprised three options, including less than three, three to five and more than five. Any number under three suggests that gaming apps are part of a person's life but are not too prominent.

Three to five gaming apps can be analyzed as playing being a present factor to a person's life, while more than five can mean that playing is considerably important to a person and that they spend a considerable time playing as it should be kept in mind that cellular devices usually come with a certain amount of storage, which is taken up by downloading applications. This serves to test how much a person is into games and gathers first information needed to test whether people who are receptive for playing games are also receptive for entertaining gamified applications.

Page four then addresses online shopping, a highly important topic of the thesis. Within the scope of three sentences, it is explained that online shopping is gaining considerable importance and that the clothing sector takes a big lead, which indicates high competition. Afterwards, the participants were asked to affirm or deny the statement of buying clothes online (see figure 20). An affirmative answer was needed in order to proceed with the chronological order of the survey. Participants denying the statement were led to the last page of the survey as it was scheduled within the settings. The reason why an affirmative answer was needed to proceed in chronological order was that people who do not shop online are not of importance for this assessment because this thesis addresses gamification within the concept of clothing online shops.

Everyone who affirmed the statement was led to page five, where the topic of online shopping was specified with additional questions (see figure 21). Three statements served as a basis to further understand buying behavior and customer loyalty. The first question of this page asked if the participants predominantly shop their clothes online followed by the second question addressing whether participants shop at the same clothing online shop (see figure 21). These two questions can give great insight into customer loyalty in general, which can be used as a base for later analyses. Lastly, it was asked whether the price is the decisive factor in the selection of the online shop (see figure 21). As learned in chapter 2.4.3 people can be cognitively loyal. This kind of loyalty includes the choice for a competitive shop due to price reasons. When it comes to gamified applications, finding out whether people who are price sensitive can be loyal is important because it decides whether they are relevant when designing an application. If they solely cared about the price, online shops would always have to compete with each other in terms of price to keep these kind of customers, which may have a negative effect on the quality of the products on the long run. The second and third questions on page 5 are, therefore, of high importance when answering the second hypothesis.

As every subject area that is related to the topic of gamification within the online e-commerce sector has been addressed, the sixth page finally focussed on the implementation of gamified applications within the clothing e-commerce sector. The

first question from this page therefore aimed to test which field of gamified applications seems the most appealing to potential customers (see figure 22). Three options were provided including entertainment, bonus programs, and acquiring discounts.

Entertainment resembles the example of Nike+ and its fuel band app. Within the scope of an online shop, an entertaining gamified application could be an implementation to bridge the time until the ordered parcel arrives. An example could be an activity that is set up as a racing game, in which the customer needs to navigate a car to collect as many parcels as possible in a certain amount of time. The activity could even be linked to fellow customers to participate against each other. Because the activity would pursue the purpose of shortening the latency time it would not be considered a game.

A bonus program as implemented by Starbucks with the Starbucks Reward Program could be implemented into the clothing sector as follows: the more a customer purchases, the higher ranked the customer gets. The ranking could be presented within a separate section of the application, e.g. within the user account. Higher rankings lead to higher levels, which include limited edition presents or other rewards.

Acquiring discounts within the scope of a gamified application of a clothing online shop could mean that the more a person shops, the higher the discounts that they get. Again, this can be visualized in several ways, e.g. similar to an advent calendar et cetera. The difference to a bonus program is that customers would not be ranked into different categories no matter how much they shop.

The next question built upon the previous one and deepens the topic of gamified applications within the clothing e-commerce sector. As the participants were previously asked which field of gamified applications seemed attractive, this questions aimed to identify what kind of incentive seemed to be most attractive within a certain field of gamified applications. Seven options were presented and had to be evaluated, including loyalty points for the acquisition of further offers from the assortment, a coupon code for the next purchase, samples, express delivery without additional charges, a travel voucher, a voucher for another online shop or supporting a charitable idea (e.g. human rights, environmental, humanitarian aid, etc.) (see figure 22). The last option stands out as it does not have a direct connection to online shopping. Nonetheless, it is a considerable option and might be interesting to be further considered.

The seventh and therefore final page aimed to collect social demographical data of the propositi. Two questions were, therefore, asked, one regarding gender and one regarding age (see figure 23). The age distribution was collected using different age groups. The first age group was anyone younger than 18. The idea behind this group was that these people are not of legal age yet and not everyone may own a credit or debit card. The second age group were people between 18 and 25. These people are

oftentimes students, apprentices, et cetera who have limited financial means and therefore a different attitude towards price and incentives. The third category were people aged 26-35, who could be career entrants that are financially more independent than the previous group and still spend quite an amount of money on clothes. The next age group were 36-45 year old people who are often financially independent but whose priority may not be shopping clothes online. The second last age group was anyone between 46 and 55. The criteria that applied to the previous age group can apply on this one as well but also, people aged 46 to 55 may have a different perception of buying clothes online. The last age group was anyone aged above the previous age group. Besides the fact that these people may not shop online as much, they may not be the target group of gamified applications due to their age.

Unless questions had to be answered using either “yes” or “no” or the questions needed a specific classification (i.e. asking how many gaming apps a participant has on their cellular device or asking for the participant’s age) a rating scale of six components was chosen. A unipolar rating scale with an uneven number of positions, in which the middle category stands for a middle position has been deliberately abandoned. Providing a middle category can be an invitation to participants who show satisficing behavior, a reduction of cognitive effort (Menold & Bogner, 2015; Krosnick & Alwin, 1987). These are mostly unmotivated or fatigued people, who choose the middle category to reduce the cognitive effort of the questionnaire even though it does not correspond to their actual attitude (ibid.). Most participants would actually tend to one direction and would stick to that behavior if the middle category was not offered (Krosnick, 1991; Menold & Bogner, 2015). Several experimental studies further report that the implementation of a middle or neutral category can increase the tendency towards the middle and leads to a less thorough answer (Kalton & Holt, 1980; Saris & Gallhofer, 2007; Schumann & Presser, 1981; Menold & Bogner, 2015).

Sample period

The data were collected between December 5th and 9th 2017. During this time, the questionnaire was available online. The subjects were recruited in the sense of a "Family & Friends" interrogation (Langner, 2009, p. 62), happening within their personal, student or professional environment. In addition, people were asked to forward the survey link to increase the number of participants. The questionnaire was also shared in several Facebook groups that serve the collection of propositi, to the employees of ABOUT YOU, a clothing online shop, and Posterscope, an Out-of-Home (OOH) communications agency and by two influencers (@jonnyfoe and @sara_magdalena_) with a total reach of 252,000 followers on Instagram (Effective 09/12/2017). As a result, a

total of 365 people viewed the questionnaire, of which 345 participated in the survey and were used to generate the results.

3.1.4. Critical reflection and limitations of the analysis

Having conducted a pre-test and examined possible errors and the reliability of the survey, one cannot rule out the possibility of errors or possible disturbances. On that account, a critical reflection of the analysis is conducted that may prepare oneself for discrepancies within the results and which helps to improve for future research. Also, it can debilitate concerns that may arise.

In the case of this bachelor thesis, it can be argued that a survey does not record behavior in the best way possible. Because people have to make estimations about their own behavior, which usually happens unintentionally, there is a chance of errors arising. It is uncertain if respondents give wrong answers on purpose because there are always chances that respondents unintentionally give answers that stretch the truth because they may have a misperception regarding their behavior. Nonetheless, a survey can be designed in a way that errors are limited as much as possible. To eliminate errors within this particular research, questions that were rather hypothetical and could have been too vague to be answered were formulated in a way that they seemed less hypothetical. For example, instead of asking a question, the sentence was rephrased to a statement that sounded quite final. In that case, the respondents were not left thinking too much about a question but were compelled to either agree or disagree with the statement.

Moreover, as the topic of gamification is rather new, there aren't many cases of gamified applications within the clothing e-commerce sector. It can, therefore, be quite difficult for the propositi to imagine such applications. For a better understanding regarding gamification and possible applications, two examples from different industries were presented and taken as reference. These aimed to help participants with an especially low understanding of this topic to picture possible gamified applications in general, which can then be applied to the clothing sector.

In addition, the accuracy of answers given by the respondents is uncertain. As previously mentioned, artificial situations can lead to the subjects providing wrong answers (Berekoven et al., 2009; Brosius & Koschel, 2003). When the participants were asked what kind of incentive seemed to be most attractive within a certain field of gamified applications, one option addressed supporting a charitable idea (e.g. human rights, environmental, humanitarian aid, etc.) (see figure 22). This kind of question may or may not cause the subjects to give a false answer because participants may rank this option higher than they actually would out of decency. Other factors, such as the season, in which the topic of charity is addressed significantly often, may also influence

their reaction. However, this case cannot be prevented in the scope of a survey, as it is a popular weakness of this research method.

Lastly, due to the time pressure and limited options to share the survey, only a relatively small amount of people was able to take the survey. Three hundred forty-five people within five days is a satisfactory result, however, the number of people does not represent Germany as a whole and is, therefore, unrepresentative. In order to achieve a representative result, the number of participants would have to exceed the current attendance figures by far. Notwithstanding, it can be said that this social research represents an excerpt of peoples' opinion, attitude and behavior and delivers insights about the topic and a first feedback, which can be used to be built upon in future research. Also, since the group of people that participated in the online survey has a size of n>30 it can be assumed that there is a standard distribution. The reason for this is that the standard distribution loses significance the larger the sample size (Backhaus et al., 2016).

3.2. Results and discussion

The gender ratio within the entire sample is notably unbalanced. Overall, 72.2% of all respondents who provided information about their gender are female. Thus, the number of male participants were considerably low compared to women with 95 participants (27.8%). In total, two people did not specify their gender. Reasons for having reached out to more females than males vary and cannot be answered regarding the outcome of this survey but could technically reach from females being more involved into the topic of online shopping or the employees and followers recruited being rather female than male. For a complete overview of the gender distribution cf. figure 24.

61.9% of the participants who provided their age fall under the age group of 18-25. It is the largest age group represented by the participants, followed by the age group 26-35 with 24.7% and 36-45 (4.9%). 11 people (3.2%) are aged 46-55. Only 16 participants (4.7%) were younger than 18 and solely 2 participants were 56 or older (0.6%). In total, one participant did not provide any information about their age. For a complete overview of the age distribution cf. figure 25. Due to the uneven age distribution, accurate statements about tendencies especially for people aged 36 and older cannot be made because the number of attendants representing those age groups was quite small.

According to the results of question one, the majority of people has never heard of gamification before this survey. While only 72 participants (20.9%) knew about gamification, 273 participants (79.1%) stated to not know what gamification is (see figure 6). Furthermore, more people stated to have never used gamified applications before. Out of 345 participants, only 133 people (38.6%) have used gamified applications (see fig-

ure 6). A significant number of 212 participants (61.4%) have never used any kinds of gamified applications (see figure 7).

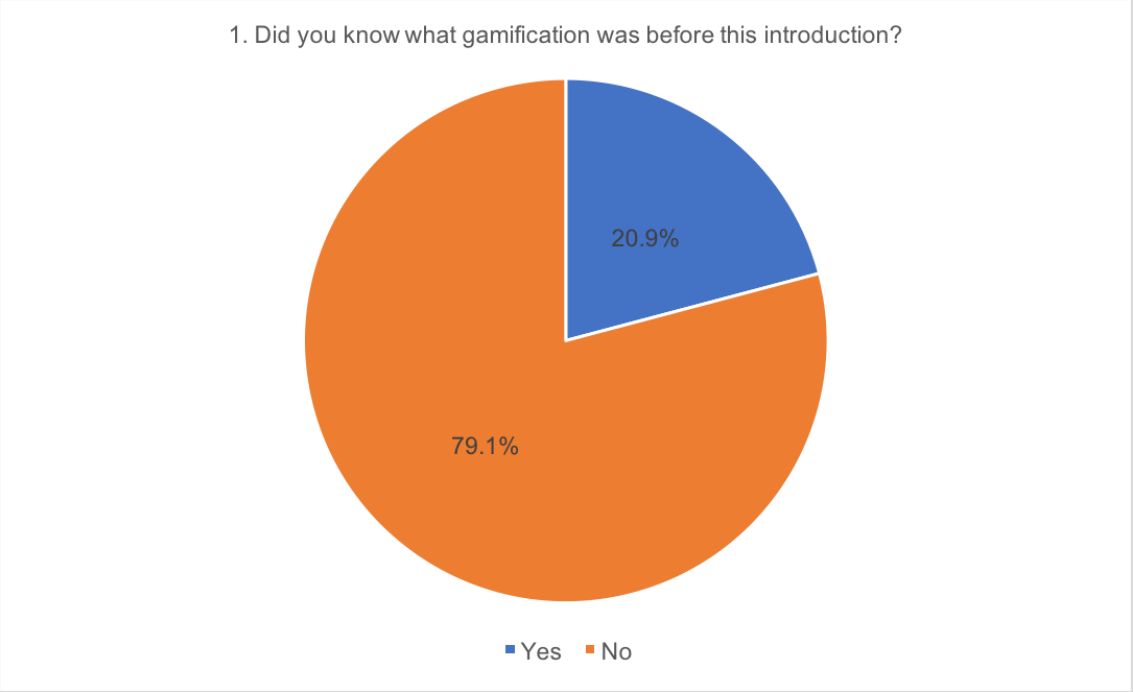

Figure 6. Did you know what gamification was before reading this introduction? n= 345

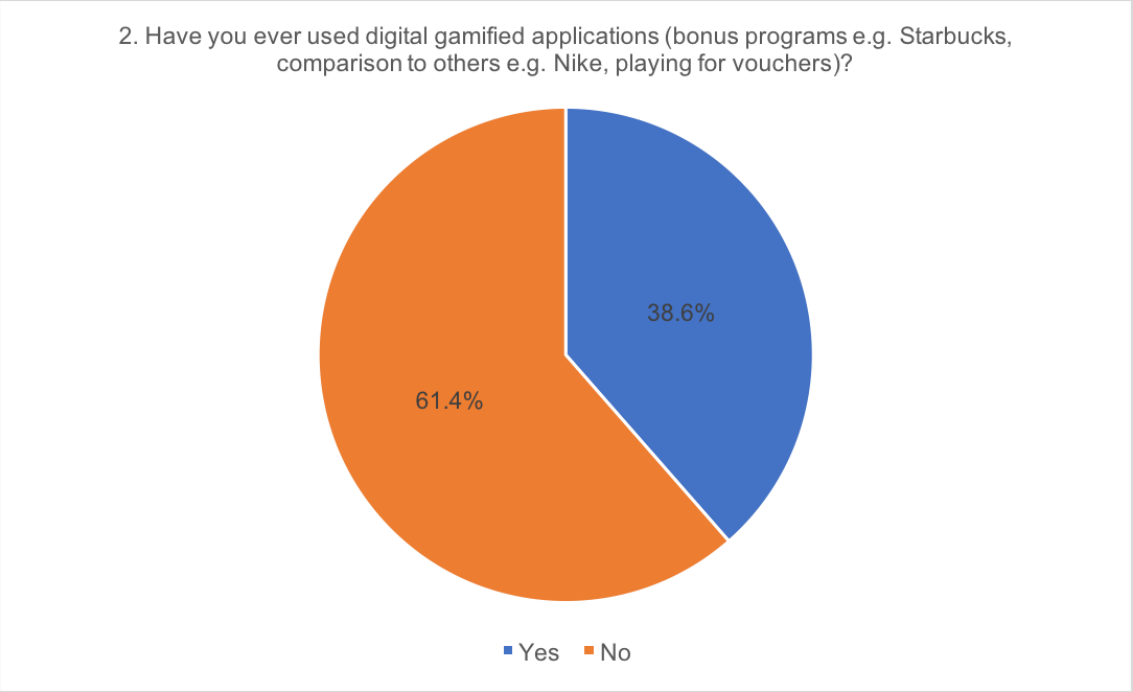

Figure 7. Have you ever used digital gamified applications (e.g. bonus programs such as Starbucks, comparison to others e.g. Nike, playing for discounts)? n= 345

Summarizing these results, it can be said that the majority of people have neither heard, nor had a hands-on experience with gamification and its various application possibilities.

When it comes to games, there is a noticeable advance to the use of gaming apps. Out of 345 participants, 90.1%, which equals 311 people, confirmed to have used gaming apps in the past. Solely 34 participants denied having used them (see figure 8).

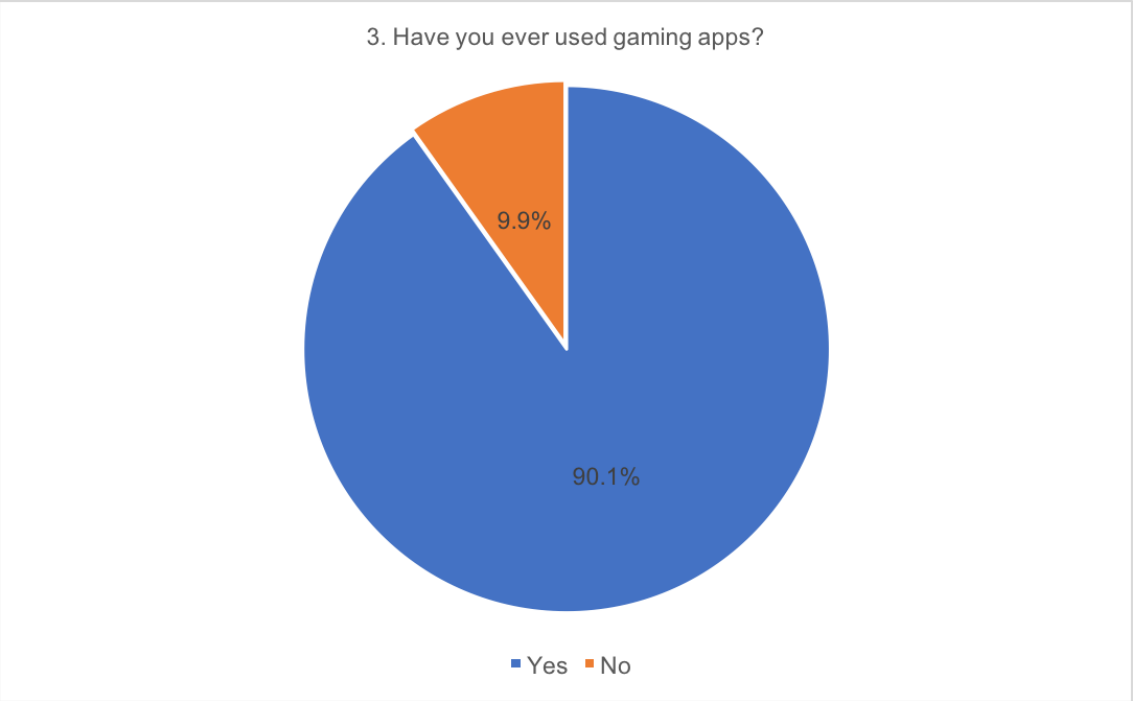

Figure 8. Have you ever used gaming apps? n= 345

According to the answer of question four, which dealt with the number of gaming apps on the participant's cellular device, the majority of people stated to have downloaded less than 3 gaming apps onto their devices (see figure 9).

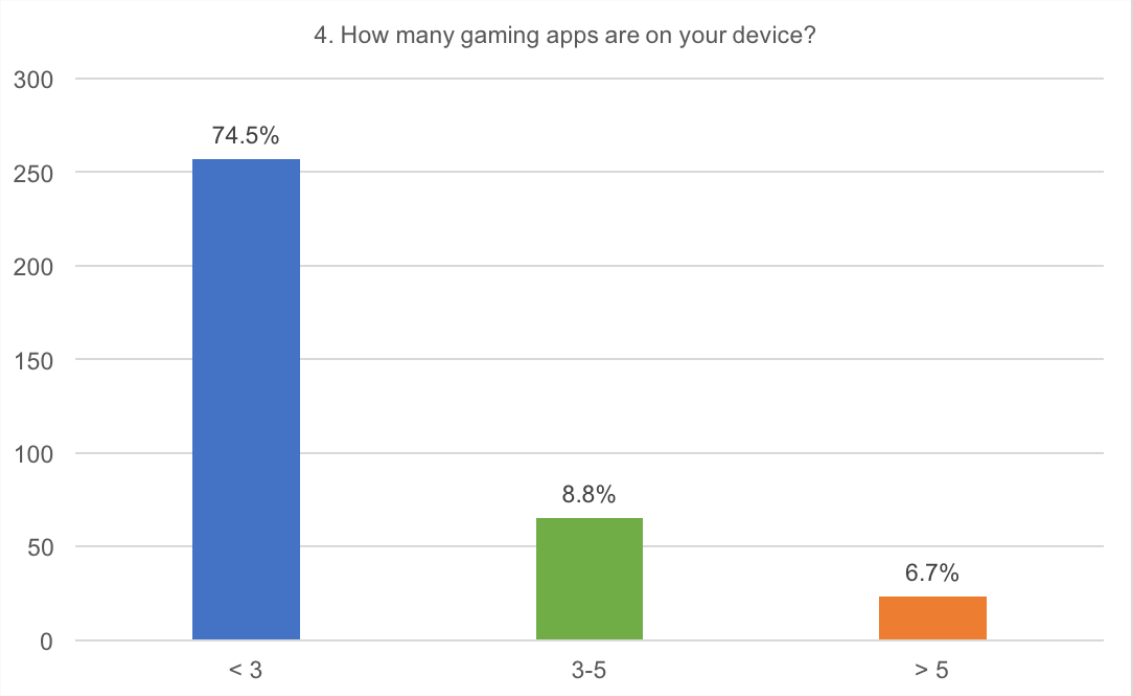

Figure 9. How many gaming apps do you have on your cellular device? n= 345

To be more precise, 257 participants (74.5%) have three or less gaming apps and therefore fall into the category of being non-players or rare players (see figure 9). 8.8% of all participants, which equals 65 people, have between three to five gaming apps on their mobile terminal and can, therefore, be considered as moderate players, who tend to use gaming apps on a more regular basis (see figure 9). Only 23 participants (6.7%) can be considered as regular players (see figure 9).

These regular players have more than five gaming apps on their cellular device, which makes them be willing to let gaming applications take up a significant amount of the storage space of their devices. Reasons for having downloaded more than five gaming apps onto one's device may vary and cannot be answered regarding the outcome of this survey but could technically reach from having great storage space to having a preference for games.

When asked how many of the participants shop clothing online, the majority of people (87.8%) answered with "yes" (see figure 10). Only a small amount of 42 participants (12.2%) stated to not shop clothes online (see figure 10). Even though a great number of participants agreed with the statement, 42 people who do not shop online seems quite high regarding the rising prominence for online shopping and the age of the participants.

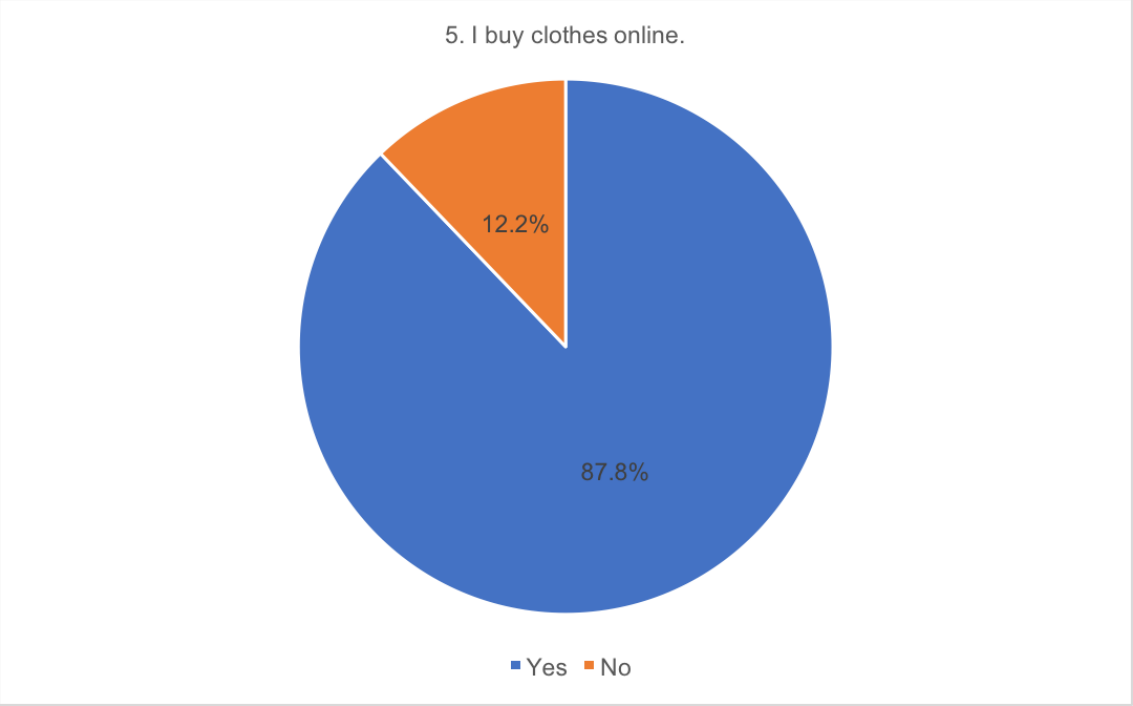

Figure 10. I buy clothes online. n= 345

With the help of a pivot table, the answers to question five were, therefore, compared with the age of the respondents. The results showed that the number of non-online shoppers totaled 13.1% for people aged 18-25 or people aged 26-35. The amount of

non-online shoppers aged 46-55 add up to 18.2% and form the largest group of people not shopping online. However, it should be kept in mind that the participants between 46-55 amount to 11 people and were outnumbered by younger participants. For a complete overview of the online shopping behavior in relation to the age distribution cf. table 11.

According to the results of question six, which addressed the prominence of online shopping, 66.3% agreed on various levels to the statement of predominantly shopping clothes online (see figure 11).

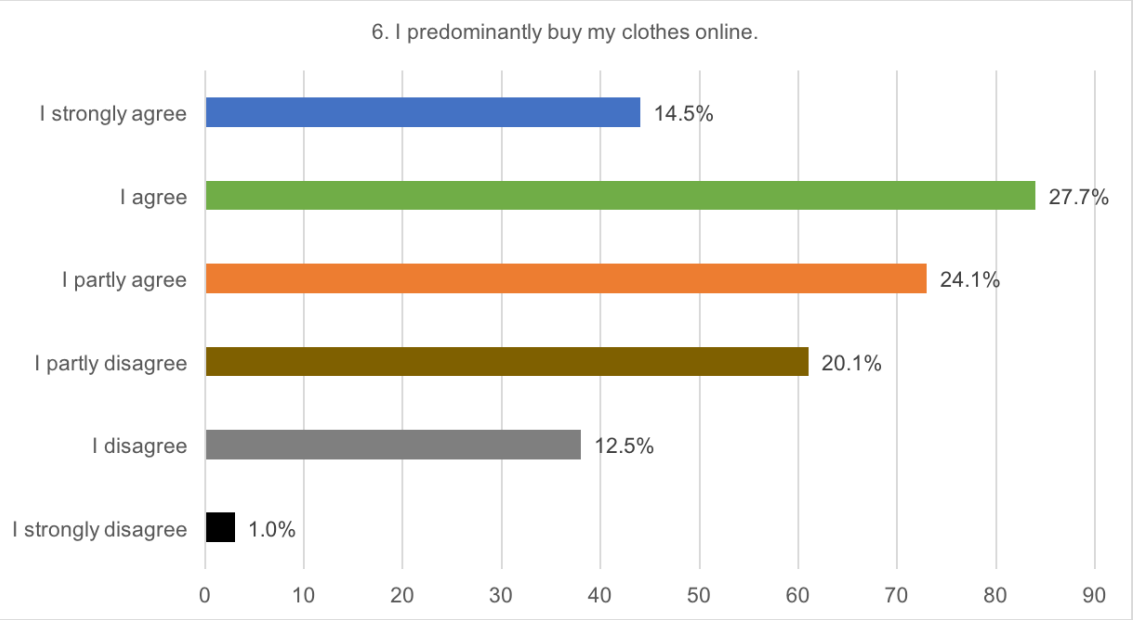

Figure 11. I predominantly buy my clothes online. n= 303

This, again, proves the trend towards online shopping, but at the same time shows that the stationary retail still has a considerable audience. As they are not loyal customers of clothing online shops they are not of high importance for this research paper, however, they need to be taken into account when further developing online shops and addressing the issue of customer acquisition.

The seventh question, which aimed to test the participant's loyalty towards online shops showed surprising results. According to the 303 participants that answered the question, 21 people (6.9%) strongly agreed to predominantly shop at the same retailer, 111 participants (36.6%) agreed and 91 people (30%) partly agreed with the statement (see figure 12). This results in 73.5% stating to be very loyal or loyal. This implies that the 26.5% of the participants who disagreed on whatever level are the ones that need to be targeted the most when implementing gamified applications. Unlike the people who consider themselves as loyal, the participants who negatively reacted to the statement need to be evaluated according to the reasons they might not be loyal so that these factors can be worked on with the help of an application.

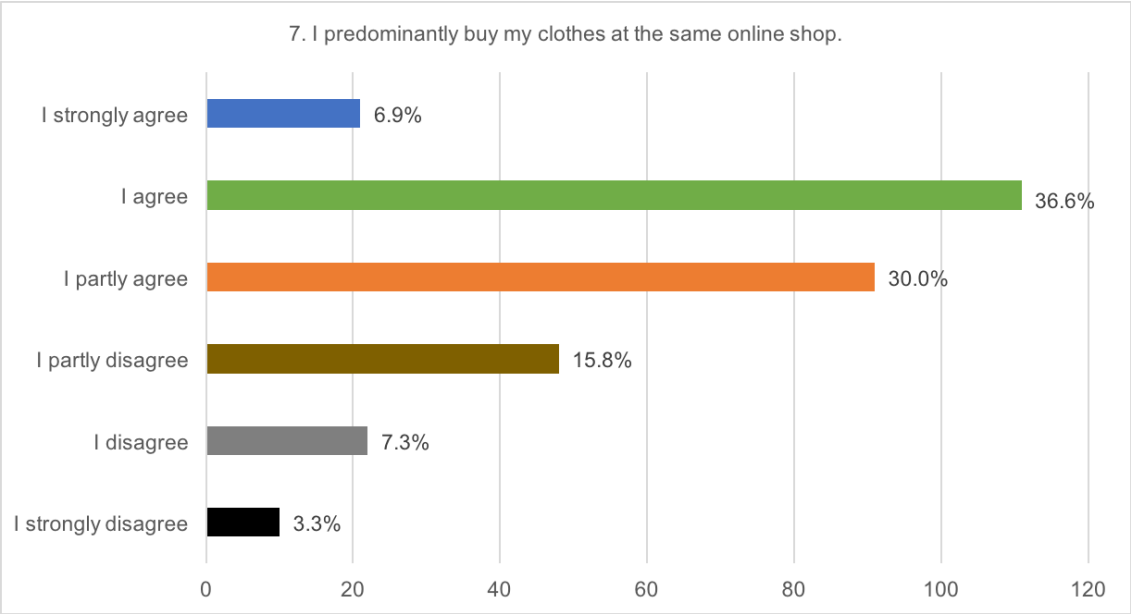

Figure 12. I predominantly buy my clothes at the same online shop. n= 303

One reason for people not being loyal is the price, which the next question further addresses. As H2 claims, people who are price sensitive are less likely to be loyal. Before looking into the evaluation of the hypothesis, the results of question eight are further analyzed. The results of this question show differences of opinion (see figure 13). However, the majority still agrees with the statement. The largest group of people counting 27.7% agreed to the statement, while 26.7% partly agreed and 13.9% strongly agreed (see figure 13). These 68.3% are assumed to be less likely to be loyal.

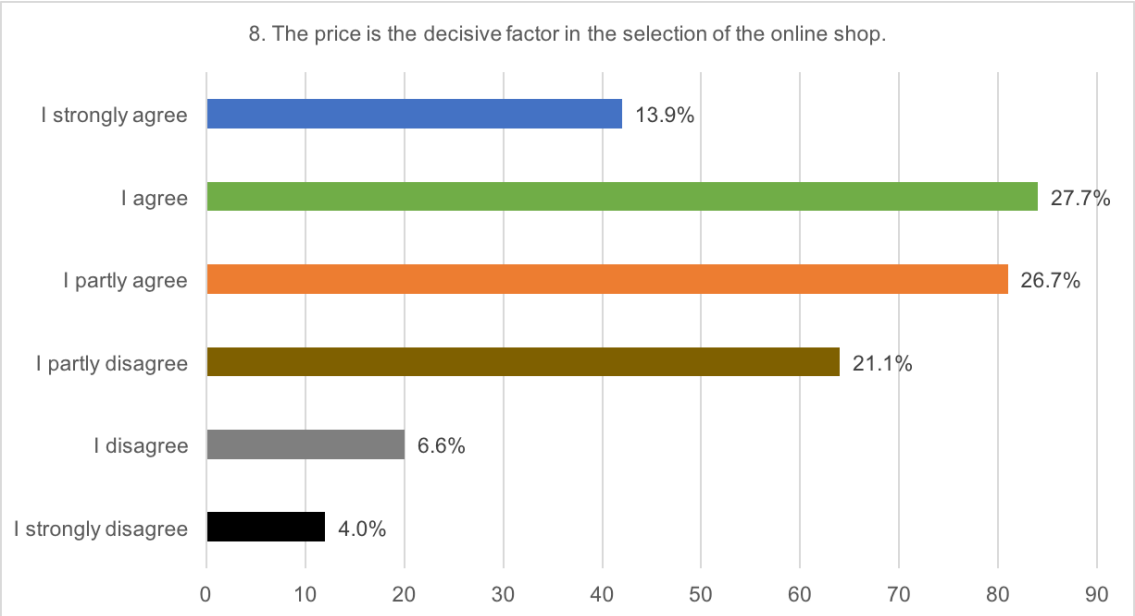

Figure 13. The price is the decisive factor in the selection of the online shop. n= 303

With the help of a pivot table, the answers of price sensitive people regarding the previous question that addressed loyalty were analyzed and showed the following: Out of

49 people who think price is the decisive factor in the selection of the online portal, solely four people consider themselves as not loyal at all (see table 2). 12 participants agreed to be disloyal and 33 partly disagreed with being loyal (see table 2). There is a noticeable shift towards the least strongest statement about disloyalty, which gives an indication that in fact, most people are loyal or at least consider themselves as that.

	I predominantly buy my clothes at the same online shop			
The price is the decisive factor in the selection of the online portal.	I strongly disagree	I disagree	I partly disagree	Total
I strongly agree	0	1	8	9
I agree	1	6	14	21
I partly agree	3	5	11	19
Total	**4**	**12**	**33**	**49**

Table 2. Results of H2: People who are price sensitive are less likely to be loyal.
Source: own depiction

This is further supported when looking at the participants who value price but consider themselves as loyal – these participants amount to 158 people, more than three times the number of people being somehow disloyal (see table 3).

	I predominantly buy my clothes at the same online shop			
The price is the decisive factor in the selection of the online portal.	I strongly agree	I agree	I partly agree	Total
I strongly agree	2	16	15	33
I agree	10	37	16	63
I partly agree	4	30	28	62
Total	**16**	**83**	**59**	**158**

Table 3. Extension of table 2: People who are price sensitive are less likely to be loyal.
Source: own depiction

Summing up and comparing these numbers, it can be said that even though most people feel price is the decisive factor when choosing an online shop, the majority of people are loyal and shop their clothes at the same online shop. Hypothesis 2 is therefore proved to be incorrect and cannot be approved.

Question 9 aimed to find out which kind of gamified application would have to be implemented in order for the people to predominantly shop at a certain retailer. The least favorable purpose is entertainment with a mean of solely 4.09 when 1 equals “I strongly agree” and 6 equals “I strongly disagree” (figure 14).

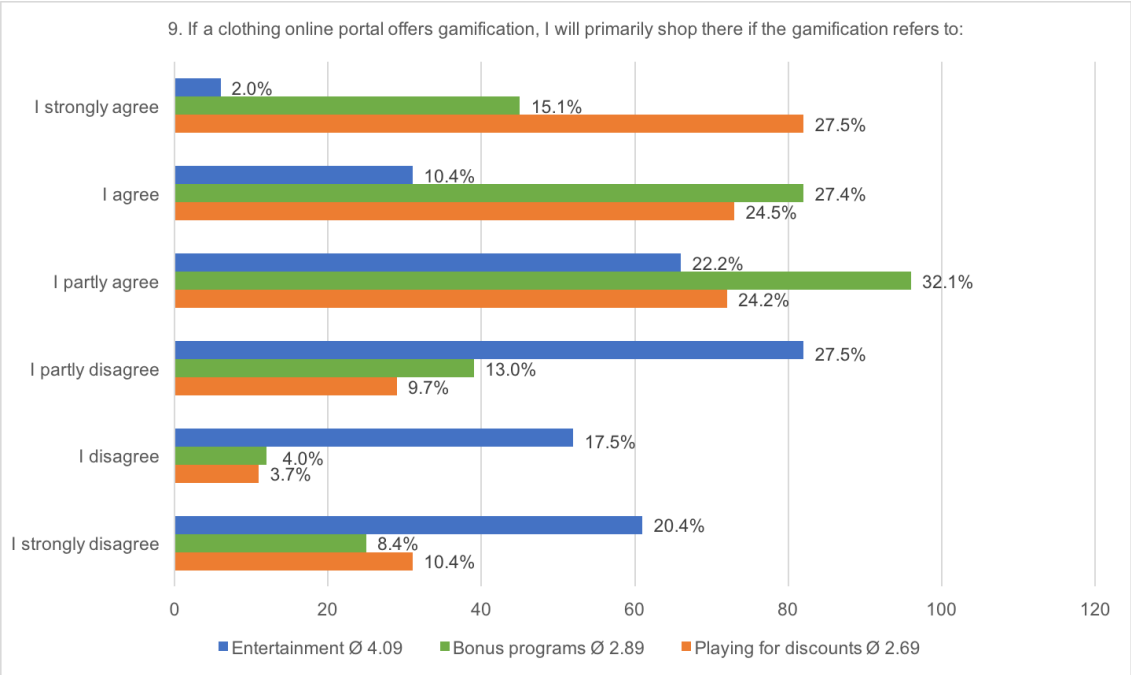

Figure 14. If a clothing online portal offers gamification, I will primarily shop there if the gamification refers to: n= 299

Bonus programs come second with a mean of 2.89 and the preferred gamified application is playing for discounts with a mean of 2.69 (see figure 14).

To test H1, which assumes that people who are receptive for playing games are likely to be receptive for entertaining gamified applications, the answers of people who have more than five gaming apps downloaded onto their cellular devices regarding their favorite gamified application need to be looked at. With the help of a pivot table it can be stated that entertainment is still ranked last with a positive consent of only 9 people (see table 4), while bonus programs are still in second place with a positive consent of 14 people (see table 5) and playing for discounts is still ranked first with 15 people positively voting for it (see table 6).

However, when comparing the percentage distribution of positive evaluations of entertainment, it can be noticed that approximately 39.1% of people with more than 5 gaming apps agree to like gamified application for the purpose of entertainment (see table 4). People with less than 3 gaming applications only amount to approx. 31.9% and people with 3-5 gaming apps only result in approx. 18.5% (see table 4). People having more apps are therefore slightly more open towards applications pursuing the purpose of entertainment than others.

Putting these findings in a nutshell, people who are receptive for playing games are more open towards entertaining gamified applications, but they still choose other applications over entertainment. However, because the hypothesis solely focusses on the willingness and openness to playing entertaining gamified applications, people who are receptive for playing games are more open towards entertaining gamified applications

than others. It is herewith certified that H1 is approved. If on the other hand, the favorite gamified application would have to be named, entertaining gamified applications would have to be ranked last and as people's least favorite application.

	Number of gaming apps			
Entertainment	< 3	3-5	> 5	Total
I strongly agree	4	1	1	6
I agree	23	4	4	31
I partly agree	55	7	4	66
I partly disagree	55	22	5	82
I disagree	40	9	3	52
I strongly disagree	47	11	3	61
n/a	33	11	3	47
Total	**257**	**65**	**23**	**345**

Table 4. Results of H1: People who are receptive for playing games are likely to be receptive for entertaining gamified applications.

Source: own depiction

	Number of gaming apps			
Bonus programs	< 3	3-5	> 5	Total
I strongly agree	33	11	1	45
I agree	63	14	5	82
I partly agree	72	16	8	96
I partly disagree	29	7	3	39
I disagree	10	1	1	12
I strongly disagree	18	5	2	25
n/a	32	11	3	46
Total	**257**	**65**	**23**	**345**

Table 5. Extension of table 4.

Source: own depiction

	Number of gaming apps			
Playing for discounts	< 3	3-5	> 5	Total
I strongly agree	62	15	5	82
I agree	57	14	2	73
I partly agree	48	16	8	72
I partly disagree	24	3	2	29
I disagree	9	1	1	11
I strongly disagree	24	5	2	31
n/a	33	11	3	47
Total	**257**	**65**	**23**	**345**

Table 6. Extension of table 5.

Source: own depiction

The last question amplifies question 9. As it has been found out that playing for discounts is the most attractive, the most favorable discounts need to be determined. The results show that on average none of the incentives was ranked negatively in a very strong way (see figure 15).

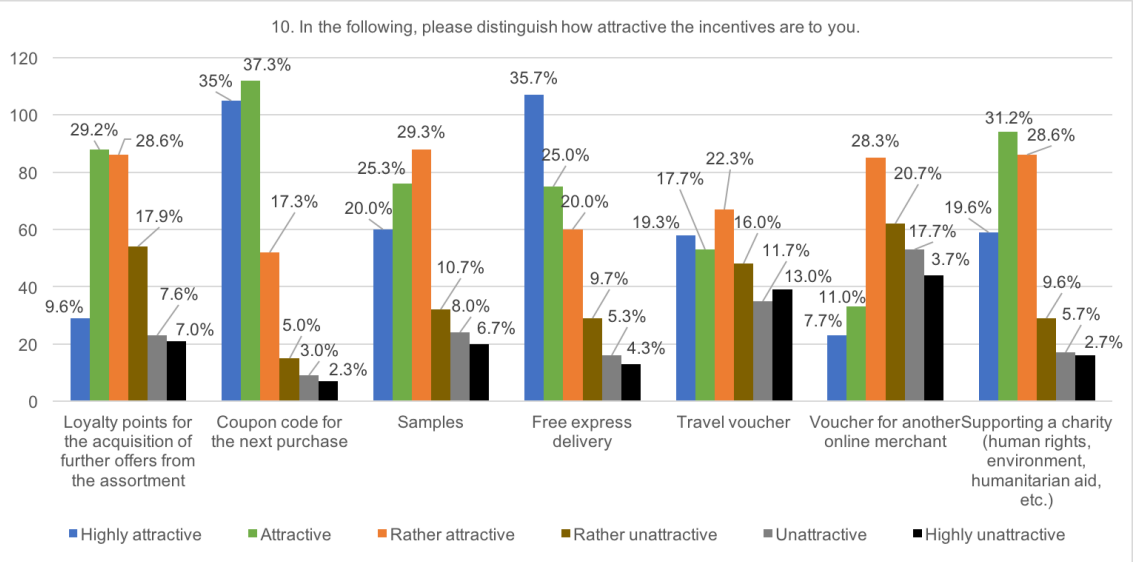

Figure 15. In the following, please distinguish how attractive the incentives are to you. n= 301

While vouchers for another online retailer was found the least attractive, points for loyalty that can be used to receive offers from the assortment, samples, and travel vouchers were all ranked in the middle, while there was a noticeable shift towards supporting a charity with 239 positive ranked votes, free express delivery with 242 positive votes and coupon codes for the next order with 269 positive votes (see figure 15). This gives an insight into peoples' favorites when it comes to incentives, which can be further researched on and used for a future outlook.

Based on the research findings of question nine and ten, it can be said that gamification can have a positive impact on customer loyalty within the clothing e-commerce sector if the gamified application was to pursue the purpose of playing for discounts or at least bonus programs. The great number of participants voting in a negative way for entertainment indicates that an application addressing pure entertainment does not influence customer loyalty. In fact, the negative votes can be interpreted as lack of interest and consequently lead to people not using the application. Regarding bonus programs and discounts, only a minor number of people would not respond to the gamified application. The great positive feedback shows that people are willing to use and hence shop with a certain retailer if they were offered to use gamified applications in order to get incentives. This leads to increased loyalty if these participants are not already loyal and part of the 73.5% that consider themselves as loyal (see figure 12).

In summary, it can be stated that the research question can be confirmed to all intents and purposes – gamification can have a positive impact on customer loyalty within the clothing e-commerce sector, but it depends on the purpose of the gamified application that is being used.

As it has been found out that pricing is a powerful element when online shopping, but it is fundamentally not included in the general concept of gamification, it does however fit to the thought of adding value to a person's life.

Finally, table 7 gives an overview of the central findings of the study:

Study findings		
Research question	Does gamification have a positive impact on customer loyalty within the clothing e-commerce sector?	(✓)
H1	People who are receptive for playing games are likely to be receptive for entertaining gamified applications.	✓
H2	People who are price sensitive are less likely to be loyal.	**X**

Table 7. Overview of the study findings.

Source: own depiction

Further findings regarding online shopping behavior in terms of gender were also retrieved. From 345 participants, 227 females (approx. 91.9%) and 73 males (approx. 76.8%) confirmed to online shop (see table 8). Regarding the large difference in the participant's gender, these results do not significantly show discrepancies. Reaching 76.8% it even indicated that quite a considerable number of men is buying their clothes online.

	Are you male or female?			
I buy clothes online	Male	Female	n/a	Total
Yes	73	227	3	303
No	22	20		42
Total	**95**	**247**	**3**	**345**

Table 8. Online shopping behavior differentiated by gender a.

Source: own depiction

Regarding whether the participants predominantly buy their clothes online, only minor differences could be spotted in regard to gender. While 58.3% of 247 female participants stated to predominantly shop online, 56.8% of the 95 male participants also agreed (see table 9). Great differences between the two genders are not recognizable. It should be noted that 42 people did not give an answer, which makes approx. 12.2% of the 345 participants that viewed the question (see table 9).

	Are you male or female?			
I predominantly buy my clothes online	Male	Female	n/a	Total
I strongly agree	14	29	1	44
I agree	24	60		84
I partly agree	16	55	2	73
I partly disagree	13	48		61
I disagree	5	33		38
I strongly disagree	1	2		3
n/a	22	20		42
Total	**95**	**247**	**3**	**345**

Table 9. Online shopping behavior differentiated by gender b.

Source: own depiction

The third and last differentiation between genders is whether they predominantly buy their clothes at the same online retailer. According to the research findings, approximately 68.8% of the female participants agreed to the statement, while the male participants agreeing to the statement add up to 53.6% (see table 10). This question also showed that 42 people decided to not answer the statement (see table 10).

	Are you male or female?			
I predominantly buy my clothes at the same online	Male	Female	n/a	Total
I strongly agree	4	16	1	21
I agree	27	83	1	111
I partly agree	20	71		91
I partly disagree	14	33	1	48
I disagree	4	18		22
I strongly disagree	4	6		10
n/a	22	20		42
Total	**95**	**247**	**3**	**345**

Table 10. Online shopping behavior differentiated by gender c.

Source: own depiction

There are no significant differences noticeable in the behavior of males and females. A tendency towards online shopping is identifiable. When it comes to being loyal, men are insignificantly less loyal than females.

4. Conclusion of research findings and guidance for future outlook

The research findings can be interpreted in two ways.

Firstly, the results of the conducted study have confirmed the relevance of the value and value dimensions of gamified applications in relation to the buying attitude and the behavioral intention of humans towards online shops. It has been empirically proven that gamified applications influence buying behavior but only if the gamified application rewarded customers with financial incentives. Based on the intentions of applications, it has been found out that the purpose of an application has a strong impact on its success. In order to achieve acceptance of the application, the benefit dimension should be considered when designing gamified applications and marketing online shops.

Further, according to the research findings, most people are price sensitive. This could indicate that the majority of them is cognitively or spuriously loyal. However, the results have shown differently and prove that, even though people think the price is one of the dominant factors when choosing an online retailer, most of them buy at the same online shop. This stands in contradiction with Oliver's four-stage loyalty model, which indicates that cognitive loyalty is solely directed at the benefits and costs of an offer, and the loyalty classifications made by George H. Brown (Blut et al., 2007; Srinivasan et al., 2002). The theory of Sivakumar & Raj (1997) that the chances of customers changing to competitive companies with alternative offers are higher because the cost-benefit ratio dominates in these situations can, therefore, not be agreed to and should be re-considered based on the present findings. However, the TPB as opposed by Blut (2008) lays the foundation of these results as the results fit Blut's proposition that a value needs to exist in order for the customer practicing certain behavior. Entertainment does not seem to be an adequate value, which may be caused due to the low level of awareness for gamification but should, therefore, be considered in the future.

In addition, the results have shown that rewards tend to lead to a higher benefit. This is especially noticeable when compared to an application that does not contain potential incentives as it does not trigger a great stimulus. In the future, clothing online shops should, therefore, try to design and implement gamified applications based on financial incentives in order to achieve the best possible results. An example for that could be to design a gamified application that involves different levels which need to be reached through buying clothes. Each level would be bound to a certain amount of money that needs to be spent, e.g. 100€ a month for the first level, 150€ a month for the second level, 200€ for the third level and so on. The sums of money solely represent an exemplary implementation of levels. In reality, the requirements of each level would have to

be evaluated based on the maximum return and profit a retailer can make while being affordable for the customers.

Secondly, the research findings can also be interpreted as follows: as customers prefer financial incentives there may not even be a need for gamified applications as those incentives can be offered without having to design and invest into an application. A gamified application would, therefore, be an innovative and fairly new integration into the clothing e-commerce sector but a noticeable need does not exist at this moment in time. On the other hand, there may be a possibility that if the topic of gamification attains more awareness in the future that other incentives, but financial incentives become more relevant. Until then, focusing on financial incentives seems to make more sense as gamified applications are not played for the sole purpose of playing.

Moreover, it was noticeable that the concept of charity was ranked quite high among other incentives. It can, therefore, be assumed that the steadily growing desire for social responsibility and ecological awareness of society (Bendell & Kleanthous, 2007) can also be transferred to the online fashion industry. Thus, it is advisable for online retailers to include sustainable aspects in their future product and communication strategy. Regarding the other incentives, it was shown that customers prefer rewards that are directly related to the next order, such as discount codes or free express delivery. Any rewards that referred to different topic areas than the next order, except for charity, was less favored. This leads to the conclusion of customers not being very future-oriented and wanting immediate results, e.g. customers do not wish to collect bonus points, which would include a whole process of collecting points in order to get rewarded sometime in the future.

Lastly, the acceptance of gamified applications requires more than only well-conceived rewards. If really implemented in the future, it needs, above all, a positive attitude and a higher level of awareness of the consumer towards the topic of gamification than it is now. Looking at the results on the level of awareness of gamification, a great lack of knowledge is shown. The majority of people is unacquainted with gamification. In order to successfully implement the concept of transferring game-typical elements and processes into non-game-related contexts in order to achieve behavioral change in the future, the level of awareness of these applications must be significantly increased. Otherwise, the lack of knowledge of society can quickly lead to rejection and disinterest. Therefore, in the context of perceived benefit, the importance of a holistic awareness-raising strategy is confirmed.

All in all, gamified applications can be of use when further intensifying customer loyalty. However, there is no real need for coming up with a whole application to reward customers with financial incentives if those incentives can be given away without an application. Notwithstanding, this can be looked at within the scope of further research as it

could be of interest to find out whether it makes a difference if people receive financial incentives without having to do something in return or if they have to earn those financial incentives.

If companies, despite these findings, still want to consider the idea there should be made an equal effort into familiarizing people with the topic and idea of gamified applications than it should be made in designing the most efficient application that serves the wanted results of an online retailer at this point in time. Following this, it would need to be assessed how successful gamified applications are in the long run and how they could be enhanced to reach the maximum return on investment. This can, among others, be done using an observation and simultaneously matching the results from an observation to the sales figures of a clothing online shop.

5. Bibliography

ABOUT YOU. (2017, June 25). ABOUT YOU - It's About You [Video file]. Retrieved November 21, 2017, from https://www.youtube.com/watch?v=_ZCAN2iP7Bg

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50* (2), 179-211. doi:10.1016/0749-5978(91)90020-t

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, N.J: Prentice-Hall.

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces. *Journal of Marketing*, *61*(3), 38-53. doi:10.2307/1251788

Anderson, C. A., & Morrow, M. (1995). Competitive Aggression without Interaction: Effects of Competitive Versus Cooperative Instructions on Aggressive Behavior in Video Games. *Personality and Social Psychology Bulletin*, 21(10), 1020-1030. doi:10.1177/01461672952110003

Assael, H. (1992). *Consumer behavior and marketing action*. Boston: PWS-KENT Publishing Company

A.T. Kearney, Inc. (2015). *The 2015 Global Retail E-Commerce Index TM* [PDF]. Chicago: A.T. Kearney, Inc. Retrieved November 05, 2017, from https://www.atkearney.com/documents/10192/5691153/Global+Retail+E-Commerce+Keeps+On+Clicking.pdf/abe38776-2669-47ba-9387-5d1653e40409

Backhaus, K., Erichson, B., Plinke, W., & Weiber, R. (2016). *Multivariate Analysemethoden Eine anwendungsorientierte Einführung* (14th ed.). Berlin: Springer-Verlag. doi:10.1007/978-3-662-46076-4

Bendell, J., & Kleanthous, A. (2007). *Deeper Luxury: Quality and Style When the World Matters*(Rep.). Godalming: WWF.

Berekoven, L., Eckert, W., & Ellenrieder, P. (2009). *Marktforschung: methodische Grundlagen und praktische Anwendung* (12th ed.). Wiesbaden: Gabler.

Bhattacharya, C. B., Rao, H., & Glynn, M. A. (1995). Understanding the Bond of Identification: An Investigation of Its Correlates among Art Museum Members. *Journal of Marketing, 59*(4), 46-57. doi:10.2307/1252327

Blut, M. (2008). *Der Einfluss von Wechselkosten auf die Kundenbindung*. Wiesbaden: Betriebswirtschaftlicher Verlag Dr. Thomas Gabler / GWV Fachverlage GmbH.

Blut, M., Evanschitzky, H., Vogel, V., & Ahlert, D. (2007). Switching Barriers in the Four-Stage Loyalty Model. *Advances in Consumer Research* [PDF], 34, 726-734. Retrieved November 20, 2017, from http://www.acrwebsite.org/volumes/v34/500528_101350_v1.pdf

Brathwaite, B., & Schreiber, I. (2009). *Challenges for game designers*. Boston, MA: Charles River Media.

Braunstein, C. (2001). *Einstellungsforschung und Kundenbindung: zur Erklärung des Treueverhaltens von Konsumenten*. Wiesbaden: Dt. Univ.-Verl.

Brosius, H., & Koschel, F. (2003). *Methoden der empirischen Kommunikationsforschung. Eine Einführung* (2nd ed.). Wiesbaden.

Bryman, A. (2016). *Social research methods*. Oxford: Oxford University Press.

Bundesverband E-Commerce und Versandhandel Deutschland e.V. (bevh). (2017, March 28). Interaktiver Handel in Deutschland 2015: Fast jeder achte Euro wird online ausgegeben. Retrieved November 07, 2017, from https://www.bevh.org/presse/pressemitteilungen/details/artikel/interaktiver-handel-in-deutschland-2015-fast-jeder-achte-euro-wird-online-ausgegeben/

Caillois, R. (2001). *Man, play and games* (M. Barash, Trans.). Urbana: University of Illinois Press.

Caswell, A. (2013, January 30). Finding Flow with Csikszentmihalyi. Retrieved November 08, 2017, from http://www.aliciacaswell.com/finding-flow-with-csikszentmihalyi/

Chip Digital GmbH. (2013, November 20). Nike Fuelband SE: Fitness-Armband im Praxistest. Retrieved January 21, 2018, from http://www.chip.de/news/Nike-Fuelband-SE-Fitness-Armband-im-Praxistest-65274138.html

Crumlish, C., & Malone, E. (2009). *Designing social interfaces: principles, patterns, and practices for improving the user experience*. Sebastopol, CA: O'Reilly.

Csikszentmihalyi, M. (1997). *Finding flow*. New York: Basic Books.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Row.

Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1992). *Optimal experience: psychological studies of flow in consciousness*. Cambridge: Cambridge University Press.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011a, May). *From Game Design Elements to Gamefulness: Defining "Gamification"* [PDF]. Vancouver. Retrieved November 07, 2017, from https://s3.amazonaws.com/academia.edu.documents/30609294/MindTrek_Gamification_PrinterReady_110806_SDE_accepted_LEN_changes_1.pdf?AWSAccessKeyId=AKIAI-WOWYYGZ2Y53UL3A&Expires=1516020181&Signature=C2uoPUaRLBECTnyUoJ50Rax%2FSeU%3D&response-content-disposition=inline%3B%20filename%3DFrom_game_design_elements_to_gamefulness.pdf

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. E. (2011b, May 07-12). Gamification: Toward a Definition [PDF]. Vancouver. Retrieved November 07, 2017, from http://gamification-research.org/wp-content/uploads/2011/04/02-Deterding-Khaled-Nacke-Dixon.pdf

Ecommerce Foundation. (2016, August). *Germany B2C E-commerce Report 2016* [PDF]. Amsterdam: Ecommerce Foundation. Retrieved November 05, 2017, from https://www.ecommerce-europe.eu/app/uploads/2016/08/Germany-B2C-E-commerce-Light-Country-Report.pdf

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: an introduction to theory and research*. Reading, MA: Addison-Wesley.

Fullerton, T. (2008). *Game design workshop: A playcentric approach to creating innovative games.* Burlington, MA: Morgan Kaufmann Publishers.

Galetto, M. (2017, June 09). What Is Customer Acquisition? Definition and Process. Retrieved November 16, 2017, from https://www.ngdata.com/what-is-customer-acquisition/

Gallo, A. (2014, November 05). The Value of Keeping the Right Customers. Retrieved November 20, 2017, from https://hbr.org/2014/10/the-value-of-keeping-the-right-customers

Gläser, J., & Laudel, G. (2010). *Experteninterviews und qualitative Inhaltsanalyse: Als Instrumente rekonstruierender Untersuchungen* (4th ed.). Wiesbaden: VS Verlag für Sozialwissenschaften.

Gotlieb, J. B., Grewal, D., & Brown, S. W. (1994). Consumer satisfaction and perceived quality: Complementary or divergent constructs? *Journal of Applied Psychology*, 79(6), 875-885. doi:10.1037/0021-9010.79.6.875

Grimm, I. (2017, December 27). Irgendwann hört der Spaß auf. *Hannoversche Allgemeine Zeitung*, pp. 2-3. Retrieved December 27, 2017.

Hall, J. S. (2014, July 31). Why Most Product Launches Fail. Retrieved December 09, 2017, from https://hbr.org/2011/04/why-most-product-launches-fail

Helgason, D. (2010, January 14). 2010 Trends. Retrieved November 04, 2017, from https://blogs.unity3d.com/2010/01/14/2010-trends/

Henderson, P. W., & Cote, J. A. (1998). Guidelines for Selecting or Modifying Logos. *Journal of Marketing, 62*(2), 14-30. doi:10.2307/1252158

Huizinga, J. (1949). *Homo Ludens: a study of the play-element in culture*. London: Routledge & Kegan Paul Ltd.

Hunt, S. D., Sparkman, R. D., & Wilcox, J. B. (1982). The Pretest in Survey Research: Issues and Preliminary Findings. *Journal of Marketing Research, 19*(2), 269-273. doi:10.2307/3151627

Jensen, G. H. (2013). Making Sense of Play in Video Games: Ludus, Paidia, and Possibility Spaces. *Eludamos. Journal for Computer Game Culture*, 7(1), 69-80. Retrieved November 06, 2017, from http://www.eludamos.org/index.php/eludamos/article/view/vol7no1-4/7-1-4-html

Kahn, B. E. (1998). Dynamic Relationships with customers: High-Variety Strategies. *Journal of the Academy of Marketing Science, 26*(1), 45-53. doi:10.1177/0092070398261005

Kalton, G., Roberts, J., & Holt, D. (1980). The Effects of Offering a Middle Response Option with Opinion Questions. *The Statistician, 29*(1), 65-78. doi:10.2307/2987495

Kaye, L. K., & Bryce, J. (2012). Putting The “Fun Factor” Into Gaming: The Influence of Social Contexts on Experiences of Playing Videogames. *International Journal of Internet Science*, 7(1), 23-37. Retrieved November 11, 2017, from https://repository.edgehill.ac.uk/4313/1/Putting_the_fun_factor_into_gaming._The_influence_of_social_contexts_on_experiences_of_playing_videogames.pdf.

Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based

Brand Equity. *Journal of Marketing, 57*(1), 1-22. doi:10.2307/1252054

Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology, 5*(3), 213-236. doi:10.1002/acp.2350050305

Krosnick, J. A., & Alwin, D. F. (1987). An Evaluation of a Cognitive Theory of Response-Order Effects in Survey Measurement. *Public Opinion Quarterly, 51*(2), 201-219. doi:10.1086/269029

Kühl, E. (2017, December 08). CryptoKitties: Mein Leben als Kryptokatzenzüchter. Retrieved January 21, 2018, from http://www.zeit.de/digital/internet/2017-12/cryptokitties-blockchain-ethereum-bitcoin

Langner, S. (2009). *Viral-Marketing: wie Sie Mundpropaganda gezielt auslösen und Gewinn bringend nutzen* (3rd ed.). Wiesbaden: Gabler.

Levesque, J. R. (2014). Intrinsic and Extrinsic Motivation. In *Encyclopedia of Adolescence* (pp. 1478-1479). New York: Springer. doi:10.1007/978-1-4419-1695-2_639

Lim, S., & Lee, J. R. (2009). When Playing Together Feels Different: Effects of Task Types and Social Contexts on Physiological Arousal in Multiplayer Online Gaming Contexts. *Cyber Psychology & Behavior*, 12(1), 59-61. doi:10.1089/cpb.2008.0054

McGonigal, J. (2011). Reality Is Broken: Why Games Make Us Better and How They Can Change the World. New York: The Penguin Press.

Meffert, H., Burmann, C., & Kirchgeorg, M. (2015). *Marketing: Grundlagen marktorientierter Unternehmensführung; Konzepte, Instrumente, Praxisbeispiele* (12th ed.). Wiesbaden: Springer Gabler.

Menold, N., & Bogner, K. (2015). *Gestaltung von Ratingskalen in Fragebögen* [PDF]. Mannheim: Leibniz-Institut für Sozialwissenschaften. Retrieved November 22, 2017, from https://www.gesis.org/fileadmin/upload/SDMwiki/Archiv/Ratingskalen_MenoldBogner_012015_1.0.pdf

Mitzscherling, L. (2015). *Gamification gamifizierte Apps und Kundenbindung im Mobile Commerce*. Marburg: Tectum-Verl.

Myler, L. (2016, June 08). Acquiring New Customers Is Important, But Retaining Them Accelerates Profitable Growth. Retrieved November 18, 2017, from

https://www.forbes.com/sites/larrymyler/2016/06/08/acquiring-new-customers-is-important-but-retaining-them-accelerates-profitable-growth/#5d7f21c26671

Nussbaum, M. C. (2007). *Frontiers of justice: disability, nationality, species membership.* Cambridge, MA: Belknap Press.

Oei, A. C., & Patterson, M. D. (2013). Enhancing Cognition with Video Games: A Multiple Game Training Study. *PLOS ONE*, 8(3). doi:10.1371/journal.pone.0058546

Pepels, W. (2014). *Moderne Marktforschung. Systematische Einführung mit zahlreichen Beispielen und Praxisanwendungen* (3rd ed.). Berlin: Duncker & Humblot.

Reichheld, F. (2001, September). *Prescription for cutting costs: Loyal relationships* [PDF]. Boston: Bain & Company, Inc. Retrieved November 07, 2017, from http://www.fredreichheld.com/bainweb/PDFs/cms/Public/BB_Prescription_cutting_costs.pdf

Reips, U. (2002). Standards for Internet-Based Experimenting. *Experimental Psychology, 49*(4), 243-256. doi:10.1026/1618-3169.49.4.243

Rheinberg, F. (2006). Intrinsische Motivation und Flow-Erleben. *Springer-Lehrbuch Motivation und Handeln*, 331-354. doi:10.1007/3-540-29975-0_13

Ritterfeld, U., Cody, M. J., & Vorderer, P. (2009). *Serious games: mechanisms and effects.* New York: Routledge.

Saleh, K. (2017). Customer Acquisition Vs. Retention Costs – Statistics And Trends. Retrieved November 26, 2017, from http://www.invespcro.com/blog/customer-acquisition-retention/

Salen, K., & Zimmerman, E. (2010). *Rules of play: game design fundamentals.* Cambridge, Mass.: The MIT Press.

Saris, W. E., & Gallhofer, I. N. (2007). *Design, evaluation, and analysis of questionnaires for survey research*. Hoboken, New Jersey: John Wiley & Sons.

Schaffer, N. (2008). Heuristic Evaluation of Games. In *Game Usability: Advice from the Experts for Advancing the Player Experience*. (pp. 79-89). Burlington, MA: Morgan Kaufman Elsevier.

Schell, J. (2008). *The Art of game design: a book of lenses*. Burlington, MA: Morgan Kaufmann Publishers.

Schiller, F. (2013). *Über die ästhetische Erziehung des Menschen in einer Reihe von Briefen mit den Augustenburger Briefen*. Stuttgart: Reclam.

Schuman, H., & Presser, S. (1981). *Questions and answers in attitude surveys: Experiments on question form, wording and context.* New York: Academic Press.

Shostack, G. L. (1977). Breaking Free from Product Marketing. *Journal of Marketing, 41*(2), 73-80. doi:10.2307/1250637

Sivakumar, K., & Raj, S. P. (1997). Quality Tier Competition: How Price Change Influences Brand Choice and Category Choice. *Journal of Marketing, 61*(3), 71-84. doi:10.2307/1251790

Srinivasan, S. S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of Retailing*, *78*(1), 41-50. doi:10.1016/s0022-4359(01)00065-3

Stampfl, N. S. (2012). *Die verspielte Gesellschaft: Gamification oder das Leben im Zeitalter des Computerspiels*. Hannover: Heise.

Starbucks Corporation. (2018). My Starbucks Rewards: Ein Bonus für Ihre Treue. Retrieved January 21, 2018, from https://www.starbucks.de/card/rewards

van Teijlingen, E. R., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard,16*(40), 33-36. doi:10.7748/ns.16.40.33.s1

WebFinance Inc. (2017). What is customer acquisition? definition and meaning. Retrieved November 16, 2017, from http://www.businessdictionary.com/definition/customer-acquisition.html

Wittgenstein, L. (2009). Philosophical investigations (G. E. Anscombe, P. M. Hacker, & J. Schulte, Trans.). Oxford, UK: Blackwell Publishing Ltd.

Zichermann, G., & Cunningham, C. (2011). Gamification by design: implementing game mechanics in web and mobile apps. Sebastopol, CA: OReilly.

Appendix

Seite 1

Sehr geehrte Damen und Herren,

im Rahmen meiner Bachelorarbeit an der Macromedia Hochschule führe ich eine Umfrage zur Kundenloyalität durch.
Die Antworten werden anonym und vertraulich behandelt und ausschließlich für diese Arbeit verwendet. Die Teilnahme wird ca. drei Minuten dauern.
Bei Fragen stehe ich Ihnen gerne unter der E-Mail-Adresse lgrotkamp@stud.macromedia.de zur Verfügung.

Vielen Dank, dass Sie sich für meine Untersuchung ein paar Minuten Zeit nehmen.
Louisa Grotkamp

Figure 16. Introductory page. This figure illustrates the greeting and background information concerning the survey.

Was ist Gamifizierung?

Gamifizierung nennt man die Anwendung spieltypischer Elemente in einem spielfremden Kontext. Hierunter fallen zum Beispiel Apps, bei denen es nicht hauptsächlich um das Spielen an sich geht, sondern spielerisch ein Ziel verfolgt wird.

Beispiele für gamifizierte Anwendungen: Nike Fuel Band App & Starbucks Reward Program App

- Das Nike Fuel Armband, über das man gegen andere Personen mit demselben Armband sportlich antreten und seine Fortschritte mit der App einsehen konnte. Der Unterschied zu einem reinen Spiel ist hier, dass die Aktivität des Sport Treibens spielerisch umgesetzt wird.
- Das Starbucks Reward Programm, mit dem man virtuell Treuepunkte sammelt und sich so auf fortgeschrittene Levels spielt und Belohnungen erhält. Hier wird die Aktivität des Kaffeekaufs spielerisch umgesetzt.

In dieser Umfrage soll lediglich der digitale Bereich von Gamifizierung untersucht werden.

Figure 17. What is gamification? This figure illustrates introducing elements for a survey.

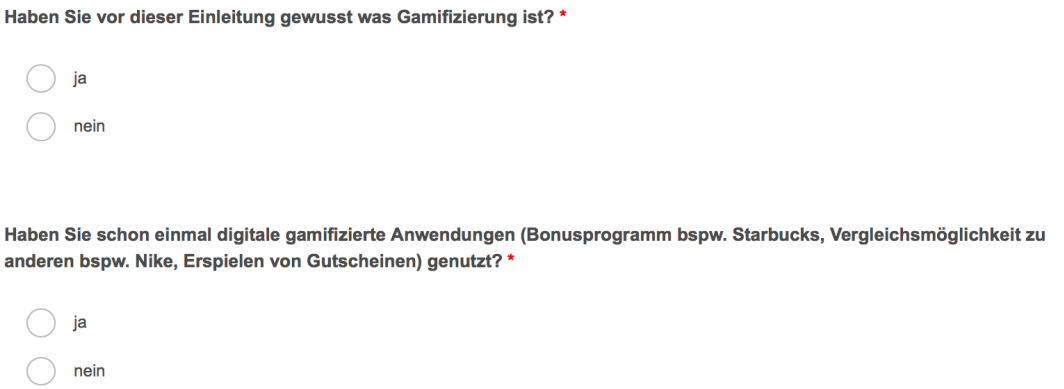

Figure 18. What is gamification? This figure addresses the level of awareness for gamification and gamified applications.

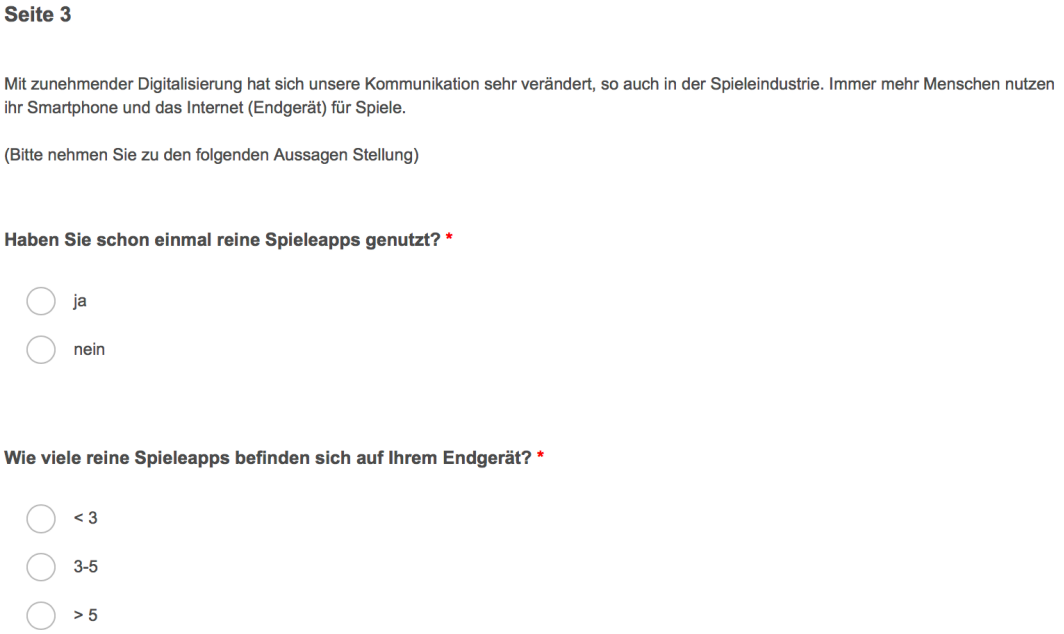

Figure 19. Games. This figure addresses the importance and prominence of games to the participants' lives.

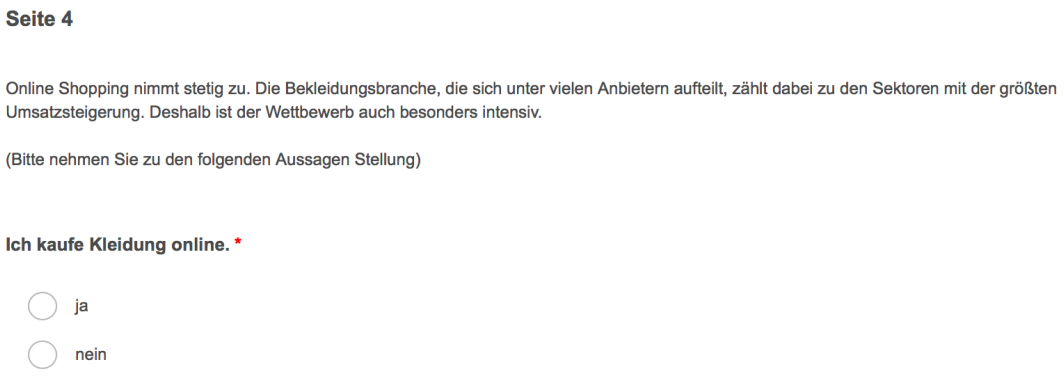

Figure 20. Online shopping. This figure addresses the importance of online shopping to the participants.

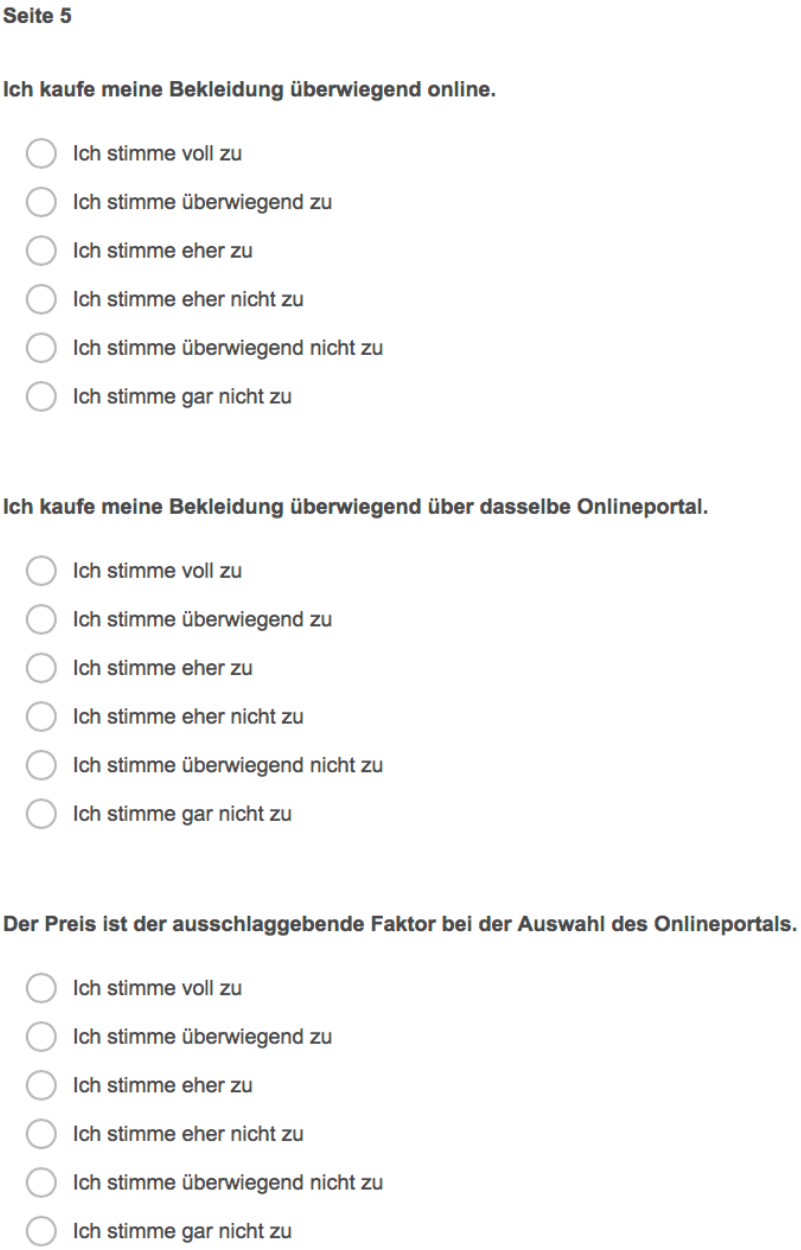

Figure 21. Buying behavior. This figure addresses the buying behavior of the participants.

Seite 6

Wenn ein Bekleidungs-Onlineportal Gamifizierung anbietet, werde ich vorrangig dort einkaufen, wenn die Gamifizierung sich auf Folgendes bezieht:

	Ich stimme voll zu	Ich stimme überwiegend zu	Ich stimme eher zu	Ich stimme eher nicht zu	Ich stimme überwiegend nicht zu	Ich stimme gar nicht zu
Entertainment	○	○	○	○	○	○
Bonus Programm	○	○	○	○	○	○
Erspielen von Rabatten	○	○	○	○	○	○

Bitte unterscheiden Sie im Folgenden, wie attraktiv welcher Gewinn für Sie ist.

	Sehr attraktiv	Attraktiv	Eher attraktiv	Eher nicht attraktiv	Weniger attraktiv	Gar nicht attraktiv
Treuepunkte zum Erwerb von weiteren Angeboten aus dem Sortiment	○	○	○	○	○	○
Gutscheincode für den nächsten Einkauf	○	○	○	○	○	○
Proben	○	○	○	○	○	○
Expresslieferung ohne Aufpreis	○	○	○	○	○	○
Reisegutschein	○	○	○	○	○	○
Gutschein für einen anderen Online Händler	○	○	○	○	○	○
Unterstützung einer caritativen Idee (Menschenrechte, Umwelt, Humanitäre Hilfe, etc.)	○	○	○	○	○	○

Figure 22. Implementation of gamified applications. This figure addresses the acceptance of gamified applications within the clothing e-commerce sector.

Seite 7

Sind Sie männlich oder weiblich?

- ○ Männlich
- ○ Weiblich

Wie alt sind Sie?

- ○ < 18
- ○ 18-25
- ○ 26-35
- ○ 36-45
- ○ 46-55
- ○ > 56

Figure 23. Social demographics. This figure addresses the social demographics of the participants.

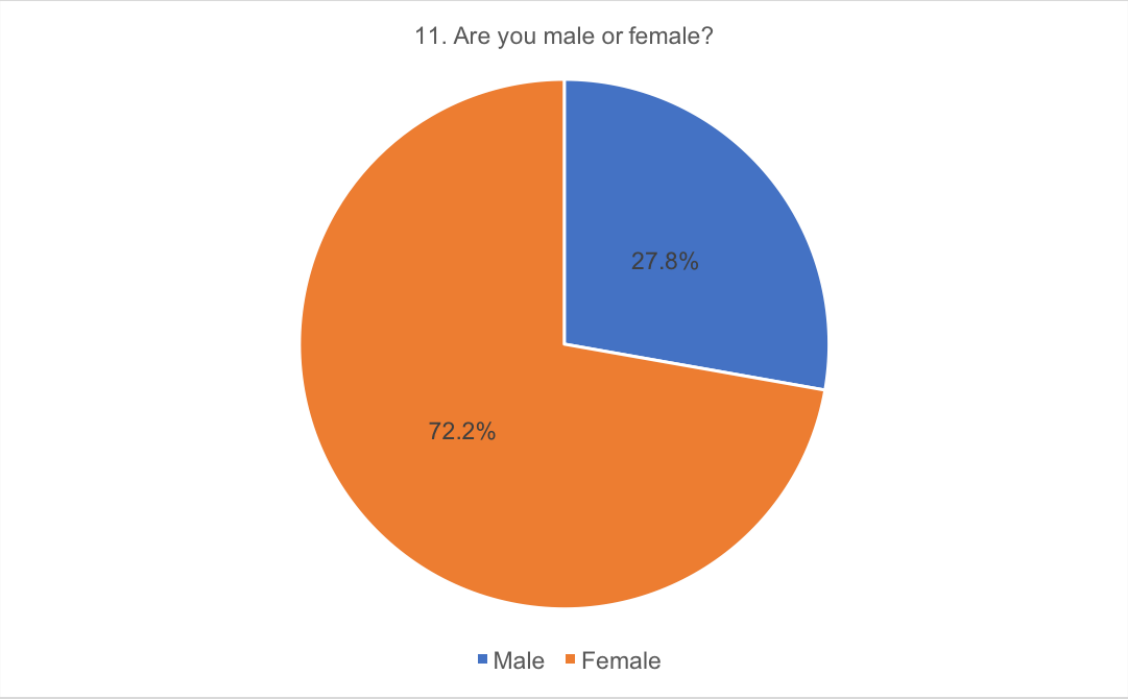

Figure 24. Are you male or female? n= 342

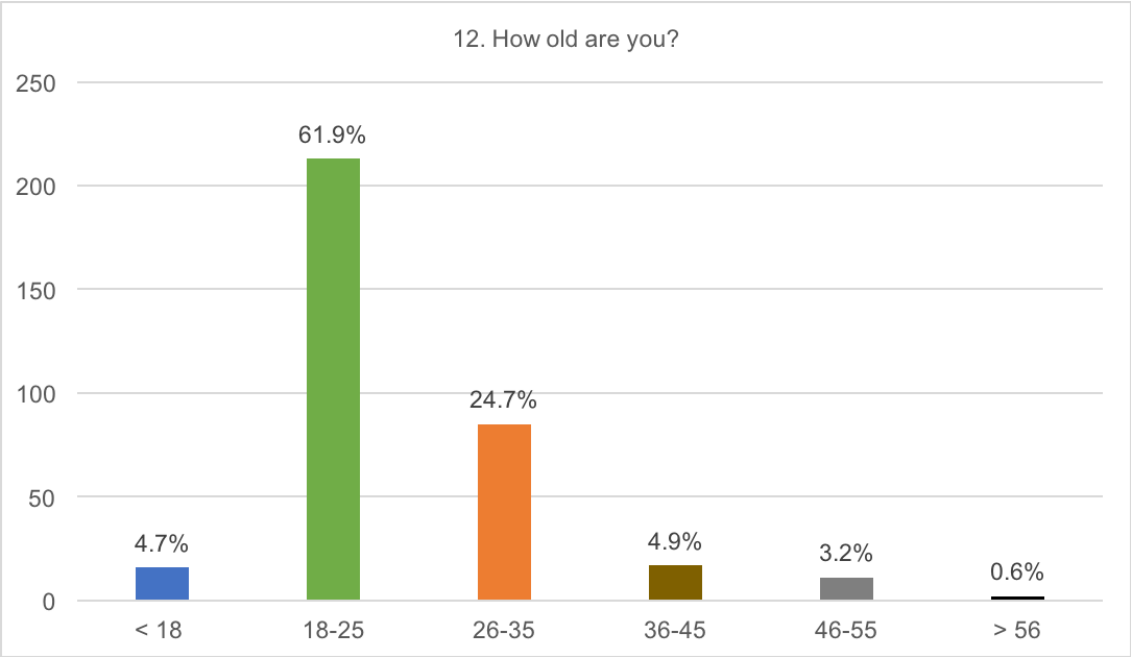

Figure 25. How old are you? n= 344

	How old are you?							
I buy clothes online	**<18**	**18-25**	**26-35**	**36-45**	**46-55**	**>56**	**n.a.**	**Total**
Yes	15	185	74	17	9	2	1	303
No	1	28	11	0	2	0	0	42
Total	**16**	**213**	**85**	**17**	**11**	**2**	**1**	**345**

Table 11. Online shopping behavior differentiated by age.

Source: own depiction

Sworn statement

Sworn Statement

I, Louisa Grotkamp

born on 20.10.1994

hereby declare that I have prepared this Bachelor's thesis independently and without external assistance. In doing so, I have not used any aids other than those mentioned in the enclosed list of sources.

All points that have been taken from publications literally or adapted form have been identified as such by me.

Hamburg, 02.02.2018 Louisa Grotkamp

[Place] [Date] [Signature]