The Effect of Customer Engagement on Brand Reputation in the Video Game Industry

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ABSTRACT

The rise of social media has allowed customers to quickly and passionately respond to anything a firm is doing, to the extent that any person today with a smartphone has the potential to reach a global audience. Subsequently, this increase in engagement towards firms could affect their brand reputation. An industry facing a tremendous surge in customer engagement is the billion-dollar video game industry. The introduction of Games-as-a-Service (GaaS) has resulted in a paradigm shift in the industry in which games have turned from definite to indefinite experiences, resulting in an increase in customers wanting to continuously let firms know their needs, feedback and wishes. The purpose of this thesis is to investigate the effect of customer engagement and its behaviors on the perceived reputation of brands within the video game industry. Consequently, the results of an online survey distributed among customers from the video game industry show that customer engagement, based on all three motivational drivers, and both its subsequent regular and broader behaviors, are positively related to brand reputation. In conclusion, the higher the customer's extent of engagement, the more positive the customer's perception of the reputation of the brand.

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Keywords

Customer Engagement, Brand Reputation, Video Game Industry, Consumer Engagement, Social Media, Cocreation, Customer-to-customer.

12th IBA Bachelor Thesis Conference, July 9th, 2019, Enschede, The Netherlands. Copyright 2019, University of Twente, The Faculty of Behavioural, Management and Social sciences

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1. INTRODUCTION

Social media enabled the world to become ever so interconnected and have completely changed the way in how people not only interact with each other, but with firms as well (Verhoef et al. 2010; Dijkmans et al. 2015). The rise of these new media allowed customers to quickly and passionately respond to anything a firm is doing, to the extent that any person today with a smartphone has the potential to reach a global audience (O'Reilly, 2007). Furthermore, customers are now preferring to seek out information, knowledge and advice about their current and future purchases on online social media platforms, forums and review websites, instead of traditional offline platforms. In response, firms have started to shift their means of communication towards those same online platforms, in order to properly engage with these customers (Burson-Marsteller, 2012). Consequently, firms hope to improve their perceived brand reputation by using these online discussions, social media activities, and further engagement behaviors to develop customer loyalty, improve their brand identity, and increase trustworthiness (Dijkmans et al. 2015; Kapferer, 2012). However, this begs the question whether these customer engagement behaviors in the form of social media activities are indeed favorable for the firm's perceived brand reputation. The study aims to answer this question, by investigating this relationship within the video game industry.

Scholarly attention was always in abundance within this industry, yet much of this attention focused on the interaction between the game and the player, new ways of educating, and exploring potential for psychological help. Back in 2001, the video game industry had become a serious academic field, but its focus remained on the games, the players, and the interaction between these two (Aarseth, 2001). Despite its popularity in contemporary pop culture and academic fields, the roles of brand reputation and customer engagement in this industry have not received the attention they deserve, thus indicating a research gap between brand reputation and customer engagement literature, and a billion-dollar industry (Burgess & Spinks, 2014).

This research gap is further indicated through the fact that major firms in the video game industry have been struggling due to the industry's shift towards Games-as-a-Service (GaaS). With GaaS, customers are now continuously engaging with the services of the industry. As customers increase their engagement with the service as it becomes more continuous, so does their need to engage with the brand to continuously let them know their needs, feedback and wishes (Horti, 2018). Subsequently, this increase led to a series of controversies surrounding poor customer-firm interactions on social media due to abysmal customer experiences (Starkey, 2018; Gilbert, 2017), indicating that some firms seem to lack the knowledge to deal with or simply do not care about this increase in customer engagement and its possible effects on their brand reputation. The study therefore tries to shed some light on to these effects, which not only contributes knowledge to the existing marketing and customer relationship management literature, but is practically relevant to firms within the industry as well.

The following research question is formulated:

"What is the effect of customer engagement and its behaviors on the perceived reputation of brands within the video game industry?"

The study starts off with a comprehensive literature review examining the video game industry, brand reputation and customer engagement. Their definitions will be thoroughly explained and the relationships and hypotheses between the latter constructs will be depicted. Next, these relationships and hypotheses will be tested and investigated through a quantitative research. Subsequent chapters discuss and conclude the results of the research, examine the limitations of the study and provide points for future research.

2. LITERATURE REVIEW

The purpose of this study is to conduct research into the effects of customer engagement on brand reputation within the video game industry. Following a brief introduction into the video game industry, further sections of the thesis present a comprehensive overview of the literature in which the key concepts brand reputation and customer engagement, along with relevant theories and relationships, are thoroughly examined and explained. Next, based on this comprehensive literature review, several hypotheses are formed which are central to this study. Finally, the final section of the literature review concludes with a conceptual model in which the key constructs customer engagement and brand reputation, their relationship and the hypotheses of this study, are depicted.

2.1 The Video Game Industry

The video game industry is seen as a leader of new media development and deemed to be the "fastest growing and most exciting category of mass media for the coming decade" (Marchand & Hennig-Thurau, 2013).

The traditional business model within the video game industry is developing exceedingly expensive and successful blockbuster video games (Cox, 2014). These often-called AAA (triple-A) games are becoming increasingly expensive, and have been met with heavy criticism in the past years (Leander and Weber, 2016). The traditional business model limits creativity (Roch, 2004), has become increasingly complex (van Lent, 2008), and both production and marketing budgets have exploded (Takahashi, 2009), resulting in the traditional business model being seen as failing (Le Diberder, 2012).

However, the industry is at a turning point, as customers are getting used to new and different business models. The dominancy of the traditional fixed business model is rapidly declining, to the extent that the launch of several *massively multiplayer online role-playing games* (MMORPGS) caused a paradigm shift (Zackariasson and Wilson, 2010). Consequently, this led to the introduction and popularization of a new business model: a revenue model based on monthly paid subscriptions. A *freemium* revenue model in which the game was free-to-play (F2P), but customers could buy and were encouraged to spend on additional custom features, outfits, looks and designs, was another transition within the video game industry. Even to this day, the freemium business model is the most lucrative and commonly used model within the mobile video game industry (Schick, 2014).

The video game industry is yet again experiencing a transition, as the introduction of Games-as-a-Service (GaaS) has resulted in another paradigm shift in which games have turned from definite experiences, to indefinite experiences. While GaaS is not that dissimilar to MMORPGS or other subscription-based models, GaaS is not simply seen as a model. More and more games are shifting towards a continuous service, to the extent that complete offline single player games, which used to be a definite experience, have turned into a live service (Totilo, 2018). As customers increase their engagement with the service as it has become more continuous, so does their need to engage with the brand to continuously let them know their needs, feedback and wishes, which if not properly handled, could be detrimental to the brand (Horti, 2018).

2.2 Brand Reputation

Further sections of the literature review will focus on customer engagement and delve deep into the construct, whereas this section of the literature review will focus on the literature surrounding brand reputation.

The focus of this study is on the effect of customer engagement on the essential dimension of strategic brand management: brand reputation. To properly discern the dimension of brand reputation, it is helpful to understand the connected dimensions of strategic brand management, which are not only linked, but heavily influence each other as well. (Kapferer, 2008; Roper and Fill, 2012; Leander and Weber, 2016; Burgess and Spinks, 2014). Brand reputation will be thoroughly explained, while the other dimensions "identity" and "communication" will be briefly mentioned.

Brand reputation is defined as "a collective representation of a firm's past behavior and outcomes that depicts the firm's ability to render valued results to multiple stakeholders" (Fombrun et al. 2000).

Reputation refers to what lies in between the goal and reality of the brand. The dimension is defined as the perceptions, beliefs, and impressions of society; whether they are stakeholders or not (Roper and fill, 2012). Furthermore, a distinction between the reputation of a firm and the one of a product or service, can be made. The former is made by again, everyone in society, and being a stakeholder is irrelevant. Anyone even giving the slightest hint of their opinion about the firm or its brand is contributing to its reputation (Roper and Fill, 2012). Reputation of the latter, the products and services, is predominantly done through the customers.

The construct reputation can also be defined as the total amount of assumptions held by the stakeholders about the firm (Kapferer, 2008). As the reputation of a brand increases, so does the attractiveness of the brand as well, which then consequently leads to a demand of that brand, increasing its attractiveness toward new and additional customers. Reputation can be a double-edged sword (Keller, 2013). A good and positive reputation has its advantages but takes some time to develop. Conversely, a bad reputation is created practically instantly, following even the slightest of mistakes (Kapferer, 2008; Keller, 2013) and this is of utmost importance, especially for brands with services.

While being active on different social media platforms can be beneficial, firms should not underestimate the potential dangers (Dijkmans et al. 2015). Social media platforms are certainly not a one-way street through which the firm can communicate to its customers. Rather, the platforms remain unconstrained and anyone can participate. Subsequently, anyone has the possibility to tarnish the reputation of any organization, as anyone could uncontrollably share their opinions which could directly go against what an organization is trying to communicate. (Aula, 2010). Even just a single dissatisfied customer can damage the reputation of the organization through social media. Electronic Arts (EA), a major publisher and developer within the video game industry, experienced this in the "Star Wars Battlefront 2 controversy" case (Gilbert, 2017).

The intangibility of services only further aggravates the customer's perception of the brand (Roper and Fill, 2012; Leander and Weber, 2016). As video games are treated as services (Burgess and Spinks, 2014), reputation management of the brand is crucial, especially since reputation is also connected to the identity of the brand (Keller, 2013; Kapferer, 2008). A brand can be extremely powerful, deep and strong, but it may have a bad reputation, nevertheless.

Communication can have an effect on the firm's reputation within the industry, and as such, the goal of communication is to positively influence the firm's reputation and ensure alignment between brand identity and the way the brand is perceived by stakeholders and non-stakeholders alike (Roper and Fill, 2012; Kapferer, 2008; Leander and Weber, 2016).

2.2.1 Identity

The identity of a brand does not refer to simply the name of the product or service, but rather to the vision which advances the development and realization of said products and services. That same vision, which holds the "fundamental beliefs and essential values of the brand," is defined as identity (Kapferer, 2008).

The reason to realize the correct identity of a brand is to ensure its prestige and eminence; customers should know when to recognize that brand and the reasons why (Keller, 2013). Developing the correct meaning regarding "brand performance and brand imagery associations" ensures customers may find the brand relatable to themselves (Keller, 2013; Kapferer, 2008). Furthermore, if a brand wants to be captivating, it should avoid being hollow and an artificial corporate brand, but have its own character, values and inspiration for the customer (Kapferer, 2008). Identity is at the center of a brand and links it to reputation using communication (Leander and Weber, 2016).

2.2.2 Communication

Communication refers to "the goodwill created by the positive experiences of clients or prospects with the organization, its products, its channels, its stores, its communication and its people." (Kapferer, 2008). Management of the brand identity is done through communication to influence the stakeholders' perception of the firm (Leander and Weber, 2016).

Communication within strategic brand management is to structure tangible perceptions, visible characteristics of the product or service, while adding intangible perceptions, such as awareness, superiority, and emotional bonding (Kapferer, 2008).

2.3 Customer Engagement

The major relationship researched within this study is between customer engagement and brand reputation in the video game industry.

The concept of customer engagement, which started out as simple non-transactional customer behaviors, has grown tremendously in both academic and practical relevance (Verhoef et al. 2010). Customer engagement has been defined differently by various scholars and a consensus has still not been reached (Dijkmans et al. 2015; Verhoef et al. 2010). Nevertheless, the construct customer engagement has been subject to numerous studies, including the research from Van Dijk et al. (2015) who examined the relationship between consumer engagement and corporate reputation, albeit in the airline industry.

Therefore, examining this relationship is not unprecedented in academic fields, yet connecting the two constructs in the context of the video game industry is.

The following sections of the literature review comprehensively describe the concept of customer engagement: its various definitions, dimensions and behaviors.

The importance of non-transactional customer behavior has grown tremendously since society has become even more connected (Verhoef et al. 2010). While research has focused on the transactional behavior regarding customer management, which resulted in immediate results in the form of cash flows, ignoring the non-transactional behavior could be detrimental to firms in the form of wasted opportunities and adverse consequences. These theoretical implications have been evidenced within the video game industry, as major firms have neglected their non-transactional behaviors, resulting in severe backlash towards the latest release of their latest products and services (Gilbert, 2017).

It is due to the increasing importance of these aforementioned non-transactional customers behaviors that organizations have tried to build deeper relationships between their customers and themselves, hoping to eventually generate increased value for both the firms and customers alike (Sashi, 2012).

Customer engagement is seen as an overarching construct which captures these non-transactional customer behaviors (Verhoef et al. 2010). Despite its importance being evident, the exact definition of the concept of customer engagement is still up to debate as a universally accepted conceptualization is still lacking (Burgess and Spinks, 2014). This uncertainty has led to various studies defining customer engagement differently (Vivek et al. 2014), with definitions expressed as *"customer engagement"* (Brodie et al. 2013), and *"customer brand engagement"* (Hollebeek, 2011b).

The first definition states that customer engagement is (Van Doorn et al. 2010): "the behavior [that] goes beyond transactions and may be specifically defined as a customer's behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers." Within this definition, customer engagement behaviors (CEB) can be defined as behaviors that go beyond purchase, which are expressed as word-of-mouth (WOM), blog, customer review and ratings activities (Van Doorn et al. 2010; Verhoef et al. 2010).

The second definition states that customer engagement is (Brodie et al. 2013): "an interactive process, which may emerge at different intensity levels over time reflecting distinct engagement states." This definition further extends customer engagement as a construct which involves interactivity between customers and brands, and customers to customers within the communities of these brands. It is this interactivity that distinguishes customer engagement from customer involvement.

The third definition states that customer engagement is (Hollebeek, 2011b): "the level of a customer's cognitive, emotional and behavioral investment in specific brand interactions." Customer engagement is focused on the extent of these "investments" which influence the level of engagement.

The next definition which occurs commonly is the one in which customer engagement is seen as the state of mind of the customer and their perception of connectivity with a firm (Hollebeek, 2011a). It is this aforementioned state of mind of a customer which reflects their cognitive, emotional, and psychological side of the connection with the firm (Patterson et al. 2006). As the customer's state of mind becomes more positive, or their feeling of connectivity with the firm increases, so does their extent of customer engagement expressed through brand satisfaction in the form of positive word-of-mouth (WOM) activities (Kumar and Pansari, 2016).

Much of the research on customer engagement is focused on the individual state of mind of the customer and the antecedents of the behaviors of those customers (Hollebeek, 2011a; Patterson et al. 2006; Kumar and Pansari, 2016). While it is important to determine the reasons behind the behaviors of certain customers, and possibly use these antecedents to predict future behaviors and subsequently plan for them, research has not much focused on the actual customer engagement behaviors, as well as their consequences for firms and customers, which could differ per individual, context and industry.

The focus of this study will be on these customer engagement behaviors and their consequences for the brand reputation within the video game industry. Research on the antecedents of these behaviors and the state of mind of the customer has already been conducted, and although these are still important for this study, there are but a few studies focusing on the behaviors themselves and their consequences (Jaakkola and Alexander, 2014). Using the aforementioned theories (Van Doorn et al. 2010; Brodie et al. 2013; Hollebeek, 2011b; Jaakkola and Alexander, 2014; Burgess and Sinks, 2014), customer engagement is defined within this study as: *"customer activity which goes beyond purchase and consumption, expressed through the investment of commercial resources, time and energy, resulting from motivational drivers."* (Leander and Weber, 2016). Within this definition, the behavioral aspect of customer engagement is emphasized.

The following sections of this chapter will delve deeper into the dimensions of customer engagement, and illustrate the different behaviors of customer engagement in the form of customer-tocustomer (C2C) interactions (Libai et al. 2010), and customer cocreation with regards to New Product Development (NPD) activities (Hoyer et al. 2010; Jaakkola and Alexander, 2014).

2.3.1 The Dimensions and Motivational drivers of Customer Engagement

The motivational drivers mentioned at the end of the definition in the previous paragraph, which eventually would result in customer engagement, are still up for discussion; what exactly falls under these drivers is unclear. There has not yet been agreed upon the specific motivational drivers of customer engagement (Zhang et al. 2016), apart from the fact that scholars agree that these drivers are linked to the cognitive, emotional and behavioral dimensions (Kuvykaitė & Tarutė, 2015).

Firstly, the cognitive dimension, which is defined as the extent to which the customer is interested, engrossed, focused, vehement, and contemplated with a brand and the interactions with their customers (Hollebeek, 2011b). Furthermore, the cognitive driver is regarded as a dimension in which customers build relationships, share their experiences, and learn through information contributions by themselves and other customers (Brodie et al. 2013).

Secondly, the emotional dimension, which is defined as the attitudes towards a brand and their services, whether these are positive or negative (Brodie et al. 2013). Customers could experience a display of gratitude towards a brand and develop an affection towards it when participating within the community of a brand. Therefore, feelings of "trust, empathy, pride, and safety," are further nourished, which subsequently flourishes a "sense of belonging" within the community. (Brodie et al. 2013). "The degree of a customer's positive brand-related affect in particular brand interaction," (Hollebeek, 2011b), is a definition which is broad, and covers the feelings of pride, enthusiasm and enjoyment.

Thirdly, the behavioral dimension, which is defined as the need, willingness and the degree of effort of the customer to interact, communicate, spend time and participate with the firm and its community of customers (Brodie et al. 2013; Hollebeek, 2011b).

The focus of the cognitive dimension is on the thoughts of the customer regarding the brand and their interactions with their customer base; the focus of the emotional dimension is on the feelings which occur during customer-brand interactions; the focus of the behavioral dimension is on the behaviors and subsequent actions themselves (Kuvykaitė & Tarutė, 2015).

The uses & gratification theory (UGT), which explores the antecedents of customer engagement behavior (Luo, 2010), states that customers could gain benefits from their active participation in discussions on media channels, hence their

presence. What's more, this active engagement is lately seen as customers wanting to satisfy their desires (Hicks et al. 2012).

The uses & gratification theory (UGT) endorses the aforementioned cognitive dimension and emotional dimension. First, the cognitive dimensions, which establishes the desire to learn, obtain information and feedback as motivational drivers of customer engagement (Verhagen et al. 2015). Moreover, in the form of "social integrative" benefits, the *UGT* supports the cognitive dimension, as the motivations of customer engagement are the facilitation and capabilities of social interaction. Second, the emotional dimension, while sometimes being called differently in the form of "hedonic" benefits, still encompasses the same motivations as the former dimension: the enjoyment and gratitude towards a brand or firm. (Verhagen et al. 2015). Furthermore, the uses & gratification theory (UGT) reinforces the fact that these motivational drivers influence the extent of customer engagement.

Although the dimensions are known and many studies have used them, like the concept of customer engagement itself, there is no universally accepted composition of specific dimensions (Zhang et al. 2016). While one composition consists of the cognitive and emotional dimension, using the *uses & gratification theory* (UGT), other compositions only consist of the behavioral and cognitive dimensions (Pham and Avnet, 2009).

However, most scholars have started to utilize the cognitive dimension, emotional dimension and the behavioral dimension as the conceptualization of the motivational drivers of customer engagement and hence the same is adopted within this study.

2.3.2 Customer-to-Customer Interactions

Customer engagement can be expressed into various behaviors. One of these behaviors, customer-to-customer (C2C) interactions, have become more prevalent as a result of the increasing use of new social media, including but not limited to, Twitter, YouTube, and Reddit (Verhoef et al. 2010).

Where customer-to-customer (C2C) interactions were once regarded as two customers discussing (word-of-mouth) a product, service, or its brand, the concept has since become broader. C2C interactions are defined as (Libai et al. 2010): "the transfer of information from one customer (or a group of customers) to another customer (or group of customers) in a way that has the potential to change their preferences, actual purchase behavior, or the way they further interact with others.

Online environments have contributed to the rapid rise of customer-to-customer (C2C) interactions, such as: recommendation websites, new social media, comments sections, forums, text-and-voice chat rooms, and other networked communities (Libai et al. 2010; Brodie et al. 2013; Burgess and Spinks, 2014).

It is due to the increase of new online environments that C2C interactions are expected to increase as well (Libai et al. 2010). One of these new online environments, Reddit, and other forums, have allowed for new ways of interactions between customers. Interactions within these forums consist of so called "threads": different individuals take part in various phases of the conversation, while others don't participate, but simply observe (Libai et al. 2010). Observing is still considered customer engagement, and this passive form of engagement increases loyalty towards the brand even more than active engagers do (Burgess and Spinks, 2014).

The rise of online environments has also led to virtual brand communities: a community which only exists online and includes every individual who even feels the slightest connection to the brand, despite geographical differences (Burgess and Spinks, 2014). Within these virtual brand communities, participants communicate with each other using chatting areas, voice chat channels, and general social media.

The role of influencers, the extent to which one has an impact on others within the community, has received substantial scholarly attention, but the actual effects of the "influencers" are still up for discussion. However, research has agreed that influencers certainly have a large impact on others within online communities. Although influencers can and do have an impact within offline communities, its effects are relatively smaller (Libai et al. 2010).

2.3.3 Customer Cocreation in New Product Development Activities

Another behavior of customer engagement is customer cocreation in new product development (NPD) activities. It is defined as the following *"a collaborative new product development (NPD) activity in which consumers actively contribute and select various elements of a new product offering"* (Verhoef et al. 2010; Hoyer et al, 2010). While research into cocreation itself had already been conducted, studies have mostly neglected to research the possibility of cocreation within the new product development (NPD) context.

Cocreation is not an unfamiliar concept within the video game industry and has been extremely prevalent due to niche communities and social media. As the video game industry has been rapidly shifting towards *Games-as-a-Service* (GAAS) and game development has become more continuous, development of new features within the video game, such as new levels, characters, stories and other gameplay elements, is done simultaneously with the engaging customer (Ehrhard, 2017). Due to cocreation in NPD activities being extremely prevalent within the video game industry, existing research on this concept has almost entirely focused on the software and video game industry (Hoyer et al. 2010).

The extent of cocreation in new product development (NPD) activities is expressed through the *scope* and *intensity* of the activities. The scope is regarded as the degree to which the firm is collaborating with its customers along the several stages of the new product development process, including (Hoyer et al. 2010): *"ideation, development of the product, commercialization, and post-launch activities."* The intensity is regarded as the degree to which cocreation within any of the aforementioned development stages depends on the customers for creation.

Organizations which are high on scope and intensity collaborate with the customer in all the development stages, and are to a large extent dependent on these customers for the creation process as well. Firms within the video game industry range from low on scope, low on intensity to high on scope, high on intensity. However, firms which are high on scope and intensity have become more common over the last few years, as developers have started to release games that are in the earliest of stages, and combined with the cocreation efforts of the customers, will develop into a full game. This development is referred to as "*Early Access*" (Walker, 2014).

Customer cocreation in new product development activities is extremely prevalent within the video game industry and is therefore regarded as an important behavior of customer engagement within this study.

2.4 Hypotheses

Based on the comprehensive literature review surrounding customer engagement and brand reputation, various hypotheses have been formulated. The three hypotheses, after the first main hypothesis, are focused on each of the dimensions of customer engagement and their individual effect on brand reputation. While the next three hypotheses look similar, they each focus on a different dimension and thus different measures. Measuring each dimension individually allows for a comparison between the three dimensions and perhaps a clear distinction as to which motivational dimension has the most influence on brand reputation.

Dijkmans et al. (2015) proposed that customer engagement can affect corporate reputation within the international airline industry. While the context and industry differ greatly, the insights gained from this convincing study at least indicate the direction of the relationship between customer engagement and brand reputation within this study. Therefore, the following hypothesis is formulated:

H1: Customer engagement and its behaviors have a positive effect on brand reputation.

This includes both the broader and in-depth behaviors, customerto-customer (C2C) interactions and cocreation in new product development (NPD) activities, as well as the regular customer engagement behaviors (WOM, blogging, reviews) on which the hypotheses from H2 are based. Following this, the following three hypotheses are formed which deal with regular customer engagement behaviors:

H2a: Customer engagement based on cognitive motivations has a positive effect on brand reputation.

H2b: Customer engagement based on emotional motivations has a positive effect on brand reputation.

H2c: Customer engagement based on behavioral motivations has a positive effect on brand reputation.

The comprehensive literature review further covered two indepth behaviors of customer engagement: Customer-to-Customer (C2C) interactions and cocreation in New Product Development (NPD) activities. The scope and depth of both engagement behaviors go much further than regular engagement behaviors such as word-of-mouth and blogging and therefore consist of different measures. Since the behaviors are a result of customer engagement, the same direction of the relationship between customer engagement and brand reputation is used within this study as well. Thus, the following hypotheses are formulated:

H3: Customer engagement behavior in the form of Customer-to-Customer (C2C) interactions have a positive effect on brand reputation.

H4: Customer engagement behavior in the form of Cocreation in New Product Development (NPD) activities have a positive effect on brand reputation.



Figure 1: Conceptual model of the relationship between customer engagement and brand reputation

3. METHODOLOGY

In the following chapter of the thesis, the methodology of the study is thoroughly explained. First, the research design of the online survey is described, as well as the operationalization and the measurement of the variables. Finally, the process of selection, the data collection, and the data sample is explained.

3.1 Research Design

The comprehensive literature review showcased the theoretical framework on which the study was based. In order to test the theory of the effects of customer engagement of brand reputation, empirical data was needed. A quantitative research was designed in order to collect the relevant data. Customers of the video game industry were asked to fill in a survey about the extent of their engagement towards video game discussions on social media, and their perception of the reputation of brands within the industry.

The first part of the survey focused on customer engagement and the extent to which the customer engaged in video game discussions on social media and their motivations behind it. The second part of the survey continued with customer engagement, but focused on the broader engagement behaviors such as customer-to-customer (C2C) and cocreation. The third part of the survey asked about brand reputation: how customers perceived the brands, leaders of the firms, products and services, and the workplace. It was expected that through a quantitatively designed research, valuable insights would be gained as to how different engaged customers perceive the reputation of brands within the video game industry.

For this study, an online survey was used in order to test the hypotheses formulated in the literature review and consequently find out the effects of customer engagement on brand reputation. The survey starts off with a single question in which the participant is asked if they have ever observed or participated in video game discussions on social media. This single question is extremely crucial as the answer to the question determines if the survey finishes there or not. For a customer who has not observed nor participated in video game discussions on social media has never engaged beyond purchase within the context of this research and is thus left out of the study.

The survey then moves on to the first of three major parts. All these major parts consist of questions with a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The first four hypotheses focused on regular customer engagement behaviors such as word-of-mouth (WOM), blogging, writing reviews, etc. and the motivational dimensions behind these engagement behaviors. Based on the research from Vivek et al. (2014), the first part of the survey was designed with the help of their scales to sufficiently measure customer engagement and the specific motivational dimensions: the cognitive, emotional and behavioral driver. Vivek et al. (2014) conducted research into customer engagement: how to define it, how to measure it, and what influences it. This part of the survey measures customer engagement by inquiring the participants about their degree of interest in reading, observing, sharing and participating in video game discussions. In addition to this, the participants are asked about contextual factors such as developer requests, virtual communities, and social interactions. The answers to these statements should indicate to what extent the customer is engaged in the video game industry and which variables of the dimensions motivated them the most.

Next, the participants arrive at the second part of the survey which measures the broader engagement behaviors. The last two hypotheses focused on the specific behaviors customer-tocustomer (C2C) interactions and cocreation in new product development (NPD) activities. To measure their extent of engagement of these behaviors, research from again Vivek et al. (2014) were used, as well as research from Van Doorn et al. (2010), Libai et al. (2010), and Lee and Kim (2018). Through their research, scales and measurements, the survey was further designed to properly measure customer-to-customer (C2C) interactions and cocreation activities. In this part of the survey, participants are confronted about how much impact other customers and influencers have on their purchasing behavior, as well as their degree of participation in cocreation activities in various contexts. The answers to these statements should indicate the extent of these specific engagement behaviors.

The survey then continues to the final major part: brand reputation. The five hypotheses all involved the construct of brand reputation and if customer engagement positively influences it. To properly measure brand reputation, statements were designed based on the scales from the research of Fombrun et al. (2000) and Dijkmans et al. (2015). The research from Dijkmans et al. (2015) also investigated the impact of customer engagement on brand reputation, but did this in the context of the airline industry. They based their scales of measuring brand reputation on the reputation quotient model (Fombrun et al. 2000) and adapted it to the context of their study. Within this study, the scales from Dijkmans et al. (2015) is further adapted and improved to fit the video game industry and thus this study. The participant is then asked about their extent of admiration, trust and good feeling they have regarding developers and publishers within the video game industry. In addition to this, questions about the participant's perception regarding the quality of products and services is asked, as well as their perception of the leaders within the industry, and their long-term plans. Lastly, participants are asked about the workplace, employees and management perceptions of companies within the industry.

Finally, the participants arrive at the last part of the survey, which consists of simple demographic and other customer related questions. Control variables are determined to ensure that the relationship between the independent variables and the dependent variables brand are established and no other control variables either influence or moderate this relationship.

Control variables within the study are the following: age, gender, region they are responding from, gaming platform, money spent on video games and related peripherals, time spent on video games, choice of social media.

The survey, its questions and statements, can be found in Appendix A.

3.2 Data Collection

The survey was created through Qualtrics, a survey software of which the University of Twente has a license. The language of the survey was in English, because the aim of the research was to collect data of respondents from Western Europe and North America, and English thus made the survey accessible to anyone from those regions. The duration of the survey is between five and seven minutes, depending on prior knowledge of the participant regarding contextual terms and concepts commonly used within the video game industry.

The research population of the study were gamers from the Western Regions who were also on social media and have ever observed or participated in even the smallest video game discussions on social media. These regions were specifically chosen due to the fact that the regions North America and Western Europe are the second and third biggest regions respectively in terms of video game revenue and share the same top-sold video games as opposed to the biggest region, Asia Pacific. Furthermore, recent controversies surrounding customer engagement were based on Western Regions (Starkey, 2018; Gilbert, 2017). Western Europe holds 195 million gamers, while North America holds 208 million (Newzoo, 2015). The sample size for populations after 20000 does not seem to change (CheckMarket, 2019), and thus for this study, with a confidence level of 95% and a margin of error of 5%, the sample size is set at 385 (Qualtrics, 2019).

Selection of the respondents was done through several criteria. First, respondents must be from these Western Regions at the start of the study. Second, respondents must be customers from the video game industry, meaning they have at least played or are still playing video games and consuming services from the industry within the last few years. Third, customers must be using social media. Age and gender did not matter as selection criteria. If the respondent had ever observed or participated in discussions around video games on social media, they could further fill in the survey.

The online survey was shared through several channels. Popular social media website *Reddit*, and its subreddit */r/truegaming* were used to initially kick off the survey. A thread was posted in which other users could find the survey, complete it if they wanted to, and discuss its contents in the comments with other users. Furthermore, the survey was shared in a self-owned *Discord* server in which friends with a passion for gaming could take part in the study. Next, the survey was sent to several friends on PC platform *Steam*. Finally, the survey was sent to other friends and peers through WhatsApp and similar social media.

Time constraints allowed for a significantly smaller time period of data collection than originally planned. The original sample size was set at 385, and a lower sample size would thus be less representative. Nevertheless, in order to ensure that the data was at least reliable, a threshold of 100 participants got determined. Due to the existence and planning of predetermined channels, this goal seemed attainable. In the end, the survey ran from June 11, 2019, till June 14, 2019.

The data collection process resulted in a data sample of 110 respondents from which the majority were male (N = 89; 79.46%), from Western Europe (N = 72; 65.45%), and were between the age of 22-30 (N = 51; 45.54%).

4. RESULTS

In this chapter of the thesis, the results of the online survey are examined and presented. The three-day time period allowed for a limited amount of responses. Nevertheless, substantial results have been collected and analyzed. First, some descriptive statistics are presented, followed by the discussion of the results of correlation and regression analyses and if the hypotheses are supported. Finally, the control variables and their impact are addressed.

4.1 Descriptive Statistics

The three-day collection time resulted in a total of 157 surveys being collected. To help with validity and that the reader properly understood the introduction and context of the survey, the first question was a trap question. Consequently, 10 responses were left out. Next, due to partial and missing data, 37 more responses were left out of the study. Following this, the data sample eventually consisted of 110 respondents, with 79.46% being male, and 20.54% being female.

Based on a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), the results indicate that respondents are on average engaged to a large extent ($\mu = 3.796$) and perceive the reputation of brands to be fairly neutral to good ($\mu = 3.3674$). Furthermore, respondents on average engage more in customer-to-customer (C2C) behaviors ($\mu = 3.4909$) than cocreation in new product development behaviors ($\mu = 3.2386$).

Table 1: Descriptive statistics of the results of the survey

	N	Mean	Std. Deviation
Customer_Engagement_ Mean	110	3,7496	,76865
Brand_Reputation_Mean	110	3,3674	,75986
C2C_Mean	110	3,4909	,89364
Cocreation_Mean	110	3,2386	1,06249
Valid N (listwise)	110		

Descriptive Statistics

Of the respondents, 65.5% were from Western Europe, 25.5% were from North America, and 3.6% were from Asia. The rest of respondents replied with other ... regarding the place where they are from. In total, 91% of the users were from the intended research population, Western Europe and North America. The rest of respondents (9%) came from Asia (3.6%) and other regions. However, data from those regions is still deemed usable for this study, as the context of the survey was extremely general and not related to any specific brands. Brands mentioned as examples within the study are globally renowned brands, which despite other main interests, every region should at least be familiar with. Respondents were between 22-30 old (45.5%), 16-21 old (43.8%), older than 30 (8%) and younger than 16 (2.7%). Most of the respondents use Reddit (45.5%) and YouTube (33.9%) as their most-used social media. An extreme majority of the respondents answered that a PC (64.3%) was their primary platform on which they played the most. The console PS4 was the next highest answer (23.2%), while the other major consoles, the Nintendo Switch and Xbox One, were only being played on by 4.6% each.

Next, 32.4% of the respondents played video games between 2-4 days every week. Coincidentally, another 32.4% of the respondents played video games between 5-6 days every week. Rest of the respondents played 1 day or less (5.4%) or every day (29.7%).

Following this, 28.6% of the respondents spent between \$61 and \$180 on video games and related peripherals. Another 28.6% spent between \$181 and \$300. Lastly, 17% spent \$60 or fewer, while 25.9% spent more than \$300.

To contribute to reliability, for customer engagement and brand reputation, Cronbach's alpha is used to measure internal consistency and reliability of the questions asked. Next, Cronbach's alpha of the separate and broader customer engagement behaviors, customer-to-customer (C2C) and cocreation activities, is also measured. Subsequently, Cronbach's alpha resulted in the following scores: 0.879 (customer engagement) and 0.891 (brand reputation).

These excellent scores are a result of using existing research and scales, and adapting it properly to the context within the study. Finally, Cronbach's alpha resulted in 0.702 (customer-to-customer) and 0.813 (cocreation). While the scores are lower, they can still be considered good to excellent (see Appendix B).

Table 2: Cronbach's alpha of the scale of customer engagement

Reliability Statistics

Cronbach's Alpha	N of Items
,879	11

4.2 Customer Engagement and Brand Reputation

The scales of customer engagement and brand reputation were both based on existing, ordinal Likert scales. Following this, the scales of customer engagement, their broader behaviors and brand reputation were summed up separately, and Spearman's rho was subsequently used to examine any correlations.

Table 3: Correlation between total customer engagement (regular and broad behaviors) and brand reputation

	(Correlations		
			Customer Engagement Total	Brand Reputation
Spearman's rho	Customer Engagement	Correlation Coefficient	1,000	,745
	Total	Sig. (2-tailed)		,000
		Ν	110	110
	Brand Reputation	Correlation Coefficient	,745**	1,000
		Sig. (2-tailed)	,000,	
		N	110	110

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 provides an overview of the correlation between the main variables within this study, customer engagement, their regular and broader behaviors, and brand reputation. Customer engagement and brand reputation are strongly positively related ($\rho = 0.745$). To further test the hypothesis, a multiple regression analysis was computed to examine how well total customer engagement could predict the level of perception of brand reputation. Figure 2 shows a scatterplot in which the relationship between customer engagement and brand reputation is positive and linear.

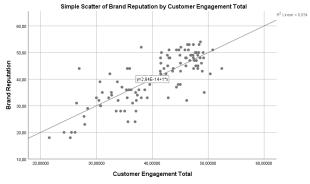


Figure 2: Scatterplot depicting the relationship between customer engagement and brand reputation

Table 4 provides a summary of the results of the multiple regression analysis. Following this, the r² is 0.634: 63.4% of the variance in brand reputation was predictable from the level of total customer engagement; three independent variables regular engagement, customer-to-customer and cocreation. With CI = 95% (0.132;0.526), for each one unit of increase in regular customer engagement, brand reputation increases by around 0.132 to 0.526 points (also see Appendix B). Multicollinearity is an issue which could occur during a linear regression analysis. It can lead to unreliable estimates of regression coefficients (Allison, 2012), resulting from highly correlated predictor variables. However, in the case of this study with related predictor variables, multicollinearity can be safely ignored as the variance inflation factors (VIFs) of the independent variables is less than 2.5. While many scholars disagree on an upper bound of the VIF, all seem to get only concerned when the VIF is reaching values of 4 or higher (Shevlin, 2001; Bock, 2018).

Table 4: Summary of the multiple regression analysis Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson				
1	,796 ^a	,634	,624	5,59217	1,767				
a. Predictors: (Constant), Cocreation_Behavior, C2C_Behavior, Engagement									
b. Dep	b. Dependent Variable: Brand Reputation								

4.3 The Three Motivational Dimensions Table 5: Correlations between the three motivational drivers and brand reputation.

			Correlations				
			Brand Reputation	Engagement _CMD	Engagement _EMD	Engagement _BMD	CE Broad Behaviors
Spearman's rho	Brand Reputation	Correlation Coefficient	1,000	,465	,664	.641	,720
		Sig. (2-tailed)		,000	,000,	,000,	,00
		N	110	110	110	110	11
	Engagement_CMD	Correlation Coefficient	,465	1,000	,527	,428	,418
		Sig. (2-tailed)	,000		,000	,000,	,00
		N	110	110	110	110	11
	Engagement_EMD	Correlation Coefficient	,664	,527	1,000	,770	,723
		Sig. (2-tailed)	.000	.000		,000	.00
		N	110	110	110	110	11
	Engagement_BMD	Correlation Coefficient	,641	,428	,770	1,000	,693
		Sig. (2-tailed)	,000	,000	,000		,00
		N	110	110	110	110	11
	CE Broad Behaviors	Correlation Coefficient	,720**	,418**	,723	,693	1,00
		Sig. (2-tailed)	,000	,000	,000	,000,	
		N	110	110	110	110	11

Table 5 provides an overview of the correlation between the main three motivational drivers within this study: the cognitive. emotional and behavioral driver and brand reputation. Customer engagement and brand reputation based on each of the dimensions are strongly positively related: CMD ($\rho = 0.465$), EMD ($\rho = 0.664$), and BMD ($\rho = 0.641$). It seems that the emotional motivational driver (EMD; $\rho = 0.664$) is the one that is most positively related to the perceived brand reputation. Furthermore, all three motivational drivers are positively related with the broader engagement behaviors, C2C and cocreation, with CMD ($\rho = 0.418$), EMD ($\rho = 0.723$), and BMD ($\rho = 0.693$), which is predictable considering the behaviors are a result of these motivations.

4.4 The Broader Engagement Behaviors Table 6: Correlations between the broader engagement behaviors and brand reputation.

Correlations

			Brand Reputation	Engagement	C2C_Behavio r	Cocreation_B ehavior
Spearman's rho	Brand Reputation	Correlation Coefficient	1,000	,711	,316	,717
		Sig. (2-tailed)		,000	,001	,000
		N	110	110	110	110
	Engagement	Correlation Coefficient	,711	1,000	,334	,719
		Sig. (2-tailed)	,000		,000	,000
		N	110	110	110	110
	C2C_Behavior	Correlation Coefficient	,316	,334	1,000	,343
		Sig. (2-tailed)	,001	,000		,000
		N	110	110	110	110
	Cocreation_Behavior	Correlation Coefficient	,717	,719	,343	1,000
		Sig. (2-tailed)	,000	,000	,000,	
		N	110	110	110	110

While Table 5 already showcased a strong positive association between the broader engagement behaviors and brand reputation $(\rho = 0.720)$, table 6 provides an overview of the correlations between the two separate engagement behaviors and brand reputation. Although the correlations presented both indicate a positive association, there seems to be a major discrepancy between the two relationships. Customer engagement behavior in the form of customer-to-customer (C2C) interactions is weakly positively related to brand reputation ($\rho = 0.316$), while engagement behavior in the form of cocreation in new product development (NPD) activities is shown to strongly positively related to brand reputation ($\rho = 0.717$). Cocreation is also shown to be more strongly positively related to engagement ($\rho = 0.719$) than customer-to-customer (C2C) behavior ($\rho = 0.334$). Furthermore, the multiple regression analysis (see Appendix B)

also shows that next to regular customer engagement (b = 0.329, p < 0.001), cocreation behavior is significantly contributing to change in brand reputation (b = 0.176, p < 0.001), while customer-to-customer (C2C) interactions is not (b = 1.106, p >0.5).

Only two control variables were found to be significantly affecting both customer engagement and brand reputation. How often participants played video games per week positively, albeit weakly, influenced both their engagement and perception of brand reputation ($\rho = 0.230$; $\rho = 0.244$). Furthermore, how much participants had spent on video games and related peripherals weakly influenced customer engagement and perception of brand reputation ($\rho = 0.245$; $\rho = 0.266$). Finally, age as a control variable was found to be not affecting customer engagement, but was weakly and negatively related to perceived brand reputation ($\rho = -0.209$). Finally, the choice of gaming platform seemed to be positively, but weakly, related to customer engagement $(\rho = 0.185).$

5. DISCUSSION

The aim of the research was to explore the effects of customer engagement on brand reputation within the video game industry, by formulating several hypotheses which theorized a positive relationship between the two variables, and testing this through an online survey. The following chapter of the thesis discusses these hypotheses based on the results of the previous chapter.

5.1 Hypotheses

5.1.1 Hypothesis 1

H1: Customer engagement and its behaviors have a positive effect on brand reputation.

Based on the correlation analysis, customer engagement, its regular and broader behaviors, are strongly positively related to the brand reputation of firms within the video game industry. Moreover, the regression analysis shows that around 63% of the variance in perceived brand reputation can be explained by customer engagement, further solidifying the relationship. In addition to this, only two control variables seem to slightly influence both variables: the amount of time spent on video games per week and the amount of money. The relationship between the two variables still stands and therefore H1 is supported. The higher one's extent of customer engagement, the more positive the perceived brand reputation.

5.1.2 Hypothesis 2

H2a: Customer engagement based on cognitive motivations has a positive effect on brand reputation.

First, customer engagement based on the cognitive motivational driver (CMD) is moderately positively related to brand reputation. The survey measured the general interest, desire to learn and appreciation of useful content as motivations. Although the relationship is positive and moderate, the cognitive dimension seems to be the least impactful on both perceived brand reputation and the broader engagement behaviors. It seems that the variables measured do influence brand reputation, albeit not that strong as the other variables of the two dimensions. Nevertheless, H2a is still supported.

H2b: Customer engagement based on emotional motivations has a positive effect on brand reputation.

Second, customer engagement based on the emotional motivational driver (EMD) is strongly positively related to brand reputation. If the motivations of the customer in engaging in discussions around video game is because they enjoy doing it, are grateful for the video game and the experience, feel a sense of belonging and are socially influenced, the perceived brand reputation is increased. This relationship seems to be the

strongest of the three, as it is most strongest positively related to both brand reputation and the broader engagement behaviors. This indicates that the variables measured have more influence on brand reputation than the other variables of the motivational drivers. Consequently, H2b is supported.

H2c: Customer engagement based on behavioral motivations has a positive effect on brand reputation.

Finally, customer engagement based on the behavioral motivational driver (BMD) is strongly positively related to brand reputation. An increase in customers who tend to engage in video game discussions because they appreciate the developer, feel a sense of community, and are grateful to the developer leads to an increase in the perceived brand reputation. Based on the strong positive relationship, we can conclude that these variables positively influence the perceived brand reputation and broader engagement behaviors is incredibly like that of the EMD. Subsequently, this indicates that the more engaged the customer becomes based on both the emotional or behavioral drivers, the higher the perceived brand reputation. To conclude, also *H2c* is supported.

5.1.3 Hypotheses 3 and 4

While Table 4 already showcased a strong positive association between the broader engagement behaviors and brand reputation $(\rho = 0.720)$, table 5 provides an overview of the correlations between the two separate engagement behaviors and brand reputation. Although the correlations presented both indicate a positive association, there seems to be a major discrepancy between the two relationships. Customer engagement behavior in the form of customer-to-customer (C2C) interactions is weakly positively related to brand reputation ($\rho = 0.316$), while engagement behavior in the form of cocreation in new product development (NPD) activities is shown to be strongly positively related to brand reputation ($\rho = 0.717$). Cocreation is also shown to be more strongly positively related to engagement ($\rho = 0.719$) than customer-to-customer (C2C) behavior ($\rho = 0.334$). Furthermore, the multiple regression analysis (see Appendix B) also shows that next to regular customer engagement (b = 0.329, p < 0.001), cocreation behavior is significantly contributing to change in brand reputation (b = 0.176, p < 0.001), while customer-to-customer (C2C) interactions is not (b = 1.106, p > 0.5).

The relationship between the broader engagement behaviors combined and perceived brand reputation is positive and strong. Moreover, they are also strongly positively related to the emotional and behavioral motivational drivers. Nevertheless, the separation of the behaviors reveals that cocreation activities have a stronger positive relationship with brand reputation than customer-to-customer (C2C) interactions have.

H3: Customer engagement in the form of Customer-to-Customer (C2C) interactions have a positive effect on brand reputation.

It seems that brand reputation is weakly positively related to customers whose purchase behavior is influenced by others and/or are impacted by *influencers*. Even if the purchase behavior of customers is more influenced by others or are more impacted by *influencers*, it does not necessarily mean an increase in the perceived brand reputation. *H3* is supported, nonetheless, since it is still a positive relationship.

H4: Customer engagement in the form of Cocreation in New Product Development (NPD) activities have a positive effect on brand reputation.

Based on the results, the relationship between customers engaging in cocreation in new product development (NPD) activities and perceived brand reputation is positive and strong. If customers were to increase their desire to cocreate in both new product development and post-release stages, as well as become more passionate about more cocreation activities, the perceived brand reputation would increase as well. Consequently, *H4* is supported.

5.2 Conclusion

The introduction of Games-as-a-Service (GaaS) has resulted in another paradigm shift in the video game industry, in which games have turned from definite experiences, to indefinite experiences, resulting in an ever-increasing, ongoing process of customers continuously engaging with the brand. The goal of the study was to shed some light on the question whether and if to what extent, customer engagement had an effect on the perceived brand reputation in the video game industry.

An online survey was constructed and shared among the gaming community in order to investigate the five hypotheses that had been formulated after an extensive literature review. The results of the survey answer the research question: customer engagement in its totality has a strong positive relationship with brand reputation. Consequently, this means that customers who tend to engage with the brand more, tend to perceive the brand reputation more positively.

Furthermore, customer engagement based on the emotional and behavioral driver was also strongly positively related to brand reputation, whereas the cognitive driver had a weak, albeit positive, relationship with brand reputation. Engaged customers who are motivated by emotional drivers such as gratitude for the video game experience or a sense of belonging, or behavioral drivers such as gratitude and appreciation for the developer, tend to perceive the reputation of brands within the video game industry more positively. In addition to this, the study examined the major engagement behaviors: customer-to-customer (C2C) interactions and cocreation in new product development (NPD) activities. Combined, the engagement behaviors showed a strong relationship with brand reputation. Separately, cocreation activities were the clear winner and were strongly and positively related to brand reputation. An increase in the customer's desire and passion to cocreate NPD activities, as well as post-release stages leads to a more positively perceived brand reputation. Conversely, customer-to-customer (C2C) interactions were shown to be way weaker, albeit still positively, related to brand reputation. Even if the purchase behavior of a customer due to others or influencers were to increase, it is not likely the perceived brand reputation would increase or become more positive.

To conclude, customer engagement and all its behaviors are positively related to brand reputation within the video game industry. The higher the customer's extent of engagement, the more positive customer's perception of the reputation of the brand. This study is one of the first studies linking customer engagement and brand reputation literature to the billion-dollar video game industry and thereby contributing new knowledge to the former academic fields, while providing practical relevance to firms within the industry that customer engagement and its behaviors in fact does affect their reputation. Moreover, based on the results, firms are able to gain insights as to which broader behaviors truly affect their reputation, and which motivational drivers lead more to an increase in perceived brand reputation.

6. LIMITATIONS

The study was met with several limitations. Firstly, and most importantly, the time constraints of the data collection led to a sample of 110 respondents. Since the original intent was to collect at least 385, the sample could be too small to be sufficiently representative of the population. This could mean that the discussed conclusions are not the case at all in practice. Nevertheless, the conclusions reached with a smaller sample size could still evoke further discussions. Furthermore, the age group of 16-30 is well represented (89.3%), as well as various social media. Research within this industry focused on marketing and consumers has been scarce, and this study therefore still adds some theoretical contributions by linking customer engagement and brand reputation literature to a billion-dollar industry.

Secondly, the mobile market was extremely underrepresented with only 1 respondent choosing a mobile device as their major platform. Results are therefore not representative of the huge mobile gaming market.

Thirdly, customer-to-customer (C2C) interactions literature has not found a proper way to measure C2C interactions only, separately from other customer engagement behaviors. Literature is still not sure if, and how, C2C interactions are considered a major engagement behavior that should be mentioned separately from regular behaviors (Libai et al. 2010). This could have contributed to the results of the study showcasing a weak positive relationship between C2C and brand reputation, since C2C could be considered a small part of regular engagement behaviors.

Fourthly, the study was too general. This is also one of the points several of the respondents have brought up. They found that the study should have focused on one or several brands within the video game industry, to properly give their opinion about them. They were able to answer honestly, nevertheless, but felt that their answers would have been more accurate if specific brands were chosen. However, this also brings up the problem of representativeness. A case study of one company cannot say something about every company in the same industry, let alone related entertainment industries. However, choosing all companies and asking for a general opinion seems to be met with some resistance as well. Furthermore, brands and developers were considered in the same category in this study, but many respondents indicated that they feel completely different about developers and publishers.

Fifthly, the context of the video game industry is rapidly changing. The literature review already mentioned the different paradigm shifts the industry went through, and how it is the middle of a new one. While the results of this study could say something about the current context, for how long is unknown. The industry may have completely changed by next year, which is not unprecedented within this industry, indicating the need for a longitudinal study. Moreover, the results within this study are not representative of the whole video game industry due to the missing representation of the mobile industry, let alone the entertainment industry. A limitation of this study may thus be that its conclusions may be limited to this specific context, and not applicable to other industries.

7. FUTURE RESEARCH

This study is one of the first studies to examine the relationship between customer engagement and brand reputation in the video game industry. While this study is a step in the right direction for the industry, much more scholarly attention is needed. Firstly, mobile markets and eastern (Asia-Pacific) markets could be explored with the model used within this study to examine the same effects in a different context. The mobile gaming industry contributes to more than half of the total video game revenue (Shankar, 2019), and conducting research within this context and with the specific brands related to that industry is something worth considering.

Secondly, future research about brands should try to include more firms to discourage the respondent from giving too much of a general opinion. It is crucial that several firms are chosen to ensure representativeness of the whole industry. Furthermore, developers and publishers should be split into different categories if brands were to be researched. Comments made by several respondents regarding this categorization have set a precedent that customers feel incredibly different about developers and publishers within this industry.

Thirdly, future research could also investigate the effects of brand reputation on customer engagement. Within this study, customer engagement was the independent variable, while brand reputation was the dependent variable. Yet, they could be switched around. This is indicated by the emotional motivational driver (EMD) and the behavioral motivational driver (BMD). The relationship between customers who enjoyed the brand and were grateful to the brand for the experience, and brand reputation was strong and positive. The same relationship between the EMD and BMD and the engagement behaviors was also similarly strong and positive, indicating that those same customers were further participating in more engagement activities, due to the positively perceived reputation of the brand. Future research could try to explore the effects of perceived brand reputation on customer engagement. Other aspects of strategic brand management such as *identity* or *communication* could also be used as both an independent and a dependent variable in future research, next to, or instead of, reputation.

Fourthly, effect of moderators on the relationship between customer engagement and brand reputation. To cope with the growth and increase of customer engagement, a trend can be identified in which customer-firm interactions without human involvement is increasing (Sing et al., 2015). However, despite promised benefits, there are some skeptical of the actual benefits of increasing the customer-firm interactions without human involvement and it seems that disadvantages of automated "customer-to-machine" interactions are abound (Hollebeek et al. 2018), especially within the video game industry (Grayson, 2019). Furthermore, other external developments which are also influencing customer engagement is the rise of new media, including but not limited to: YouTube, Twitter and Facebook (Hennig-Thurau et al. 2010). These new media may serve as obstructions to traditional business models, hindering a firm's use of their deep-rooted strategies, and could consequently be detrimental to the firm's reputation. The effects of both automation and new media on the relationship between customer engagement and brand reputation could be explored in future research.

Fifthly, the application of the model to other industries. In the literature review, cocreation was mentioned as a behavior which is incredibly known within the video game industry, but relatively new in other industries. Customer engagement is not an unknown concept within this industry, yet other industries may not have experienced nor researched it severely. It could be very interesting for future research to investigate the effects of customer engagement on brand reputation, and thus apply the model used within this study, in other contexts and industries.

8. ACKNOWLEDGEMENTS

I would like to start off by thanking my supervisor Dr. J. Henseler, who helped me along the process of writing this thesis. The initial meetings allowed me think about the subject of my thesis and what problem I wanted to address. When I proposed the context of my thesis to be the video game industry, I was surprisingly met with incredible positivity and support. Furthermore, I would like to give a special thanks to my family and friends who, despite the time constraints, not only helped me with the data collection and the distribution of the online survey, but supported me throughout the whole writing process as well.

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10. APPENDICES10.1 Appendix A: Survey

Dear participant,

I would like to thank you in advance for participating in this survey.

I am interested in how you, the gamer, engage and participate in discussions around video games on social media* and how you generally perceive the reputation of brands within the video game industry.

The survey will generally take no longer than 5 minutes.

Your answers will greatly help with my bachelor thesis.

*For research purposes, social media within this study include, but are not limited to: Facebook, Twitter, Reddit, Discord, YouTube, Twitch, and Instagram.

This survey is conducted by E. D. at the University of Twente. Data collected through this survey will be treated confidentially and will not be shared to third parties. Your participation in this study is entirely voluntary and you can withdraw at any time. No obvious data breach risks are applicable. Feel free to contact me if you have any questions.

Q1: Have you ever participated in or observed discussions around video games on social media?

- A. Yes
- B. No

LIKERT Scale, ranging from strongly disagree (1), to strongly agree (5).

The following questions will feature statements which are about the extent of your engagement towards video game discussions on social media. The answers to the statements range from strongly disagree to strongly agree. There are no right or wrong answers, and your answers only represent your opinion.

Q2: Regarding your engagement ...

- Anything related to video games on social media grabs my attention.
- I like to learn about video games and how others experienced them on social media.
- I pay a lot of attention to anything about video games and how others experienced them on social media.
- I like to spend a part of my free time discussing video games on social media.
- When I appreciate a video game, I am more inclined to discuss it on social media.

Q3: Regarding your engagement ...

- Sharing my gaming experience on social media is something I am very passionate about.
- When I participate in certain video game discussions on social media, I generally feel like I belong to that community.
- When I notice that a developer tends to interact with its community on social media, I am more inclined to share my thoughts within that community.
- Discussing video games on social media is more fun when other people around me do it too.
- I like to discuss video games on social media more when I am personally asked by the developer to engage with them and let them know my feedback.
- Sharing my video game experience and discussing it with other gamers on social media is something I am extremely passionate about.

Q4: Regarding your behaviors ...

- Reading on social media about how others experience certain video games or video game developers, generally positively influences my purchase behavior of said video games and other products of those developers.
- Watching a person I admire or look up to (e.g. influencers, famous reviewers) enjoy a particular video game makes me want to *play* that game as well.
- Watching a person I admire or look up to (e.g. influencers, famous reviewers) enjoy a particular video game makes me want to actually *buy* that game.

Q5: Regarding your behaviors ...

Some terms within this section could require additional explanation. You may also use this to refresh your memory regarding all these terms.

Cocreation activities refers to you collaborating with a company in any way to improve or customize their current product or services.

These activities include, but are not limited to: liking, upvoting, discussing or sharing official posts from the developers or publishers, discussing and offering advice on products or services, or propose new products and services, as well as improvements.

Some more examples include:

- Leaving a comment about how you would improve the balance of a certain weapon within a game.
- Liking or upvoting the suggestions of other users whose improvement ideas you share.
- Actively contributing to the development from the start by continuously leaving feedback.

"Early Access" refers to a game which is not fully developed yet, and gamers are able to play through the various stages of the development process. Those who buy such games often help with finding bugs, providing feedback and offering suggestions.

"Games-as-a-Service" (GaaS) refers to "providing video games or game content on a continuing revenue model." Most games that are being continually updated fall under GaaS. Think of games that require a subscription to play, are free-to-play but have microtransactions, or have a season pass. Examples include: Fortnite, Final Fantasy XIV, and Call of Duty.

- I am willing or would like to participate in cocreation activities on the official forums of developers (e.g. Steam discussions, official feedback threads, Reddit subreddit).
- "Early Access" is something that I greatly enjoy as I now have the ability to shape the game into something I want from the start.
- "Games-as-a-Service" (GaaS) is something that I like, because it allows for myself and other players to continuously enjoy new content and give feedback with regards to the development of the game after it has been released.
- I frequently participate in cocreating activities on official forums of developers (e.g. Steam discussions, official feedback threads, Reddit subreddit).

Q6: Regarding brand reputation ...

The following four questions will feature statements which are about your general perception of brands within the video game industry. The answers to the statements range from strongly disagree to strongly agree. There is no right or wrong answer, and your answers only represent your opinion.

Emotional appeal

- I have a good feeling about the developers and publishers within the video game industry.
- The developers and publishers within the video game industry are worthy of my admiration and respect.
- I feel like the developers and publishers within the video game industry can be trusted.

Product and services

- Products and services within this industry are generally of high quality and high production value.
- Products and services within this industry are generally good value for money.
- Products and services within this industry are generally innovative.

Q7: Regarding brand reputation...

Vision and leadership

- I feel like developers and publishers within this industry have proven that they are led by excellent leaders. For example: Phil Spencer (Xbox/Microsoft), Reggie Fils-Aimé (Nintendo).
- I feel like developers and publishers within this industry have a clear vision for their future and the future of the industry. For example: shifting towards Games-as-a-Service (GaaS), Virtual Reality.
- I feel like developers and publishers within this industry recognize and take advantage of market opportunities. For example: Battle Royale game mode.

Workplace environment

- Companies within the video game industry seem to be well-managed.
- Companies within the video game industry look good to work for.
- Companies within the video game industry look like they have good employees.

Demographic questions

Q8: Where are you from?

- A. Western Europe
- B. North-America
- C. Asia
- D. Other...

Q9: How often do you approximately play video games?

- A. 1 day or less
- B. Between 2 4 days
- C. Between 5 6 days
- D. Everyday

Q10: How much did you approximately spend on games this year? This includes game consoles, hardware, software, in-app purchases/microtransactions.

- A. \$60 or fewer.
- B. Between \$61 and \$180.
- C. Between \$181 and \$300.
- D. More than \$300.

Q11: How old are you?

- A. Younger than 16
- B. Between 16 21
- C. Between 22 30
- D. Older than 30

Q12: What is your gender?

- A. Male
- B. Female
- C. Other...

Q13: Which social media do you use the most?

- A. Instagram
- B. Reddit
- C. YouTub D. Twitch YouTube
- E. Other...

Q14: On which platform do you play the most?

- A. PC
- B. PlayStation 4 (PS4)
- C. Nintendo Switch
- D. Xbox One
- E. MobileF. Other

END OF SURVEY

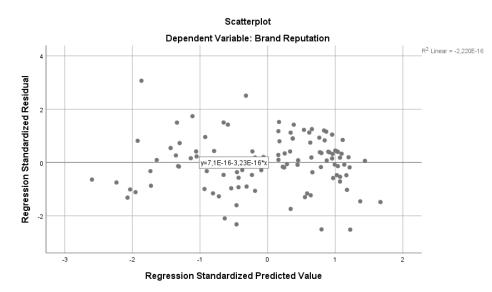
10.2 Appendix B: SPPS Outputs 1

Reliability S	Statistics	Reliability S	Statistics	Reliability S	tatistics
Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
,891	12	,702	3	,813	4

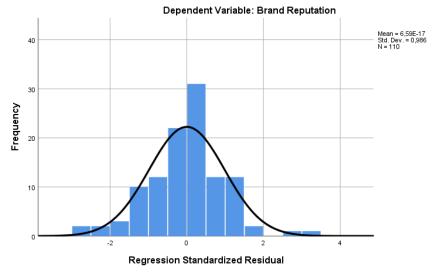
Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients			95,0% Confider	nce Interval for B	Collinearity Statistics	
Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	10,672	2,966		3,598	,000	4,791	16,553		
	Engagement	,329	,099	,305	3,318	,001	,132	,526	,408	2,450
	Cocreation_Behavior	1,106	,195	,515	5,666	,000	,719	1,493	,417	2,398
	C2C_Behavior	,176	,222	,052	,792	,430	-,264	,616	,811	1,233

a. Dependent Variable: Brand Reputation







10.3 Appendix C: SPPS Outputs 2

			Correlations				
			Brand Reputation	Engagement _CMD	Engagement _EMD	Engagement _BMD	CE Broad Behaviors
Spearman's rho	Brand Reputation	Correlation Coefficient	1,000	,465**	,664**	,641**	,720
		Sig. (2-tailed)		,000	,000	,000,	,000
		N	110	110	110	110	110
	Engagement_CMD	Correlation Coefficient	,465	1,000	,527	,428**	,418
		Sig. (2-tailed)	,000,		,000,	,000,	,000
		N	110	110	110	110	11
	Engagement_EMD	Correlation Coefficient	,664	,527**	1,000	,770**	,723
		Sig. (2-tailed)	,000,	,000		,000,	,00,
		N	110	110	110	110	11
	Engagement_BMD	Correlation Coefficient	,641**	,428**	,770**	1,000	,693
		Sig. (2-tailed)	,000,	,000	,000		,00,
		N	110	110	110	110	11
	CE Broad Behaviors	Correlation Coefficient	,720**	,418	,723	,693**	1,00
		Sig. (2-tailed)	,000,	,000	,000,	,000,	
		N	110	110	110	110	11(

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations Cocreation_B Brand C2C_Behavio Reputation Engagement ehavior .717** Spearman's rho Brand Reputation Correlation Coefficient 1,000 ,711 .316 Sig. (2-tailed) ,000, ,000, ,001 Ν 110 110 110 110 ,711 ,719 ,334 Engagement Correlation Coefficient 1,000 Sig. (2-tailed) ,000, ,000, ,000, Ν 110 110 110 110 C2C_Behavior Correlation Coefficient ,316 ,334 1,000 ,343 Sig. (2-tailed) ,001 ,000, ,000, N 110 110 110 110 Cocreation_Behavior Correlation Coefficient ,717 ,719 ,343 1,000 Sig. (2-tailed) ,000, ,000, ,000, Ν 110 110 110 110

**. Correlation is significant at the 0.01 level (2-tailed).

10.4 Appendix D: Conceptual Model

