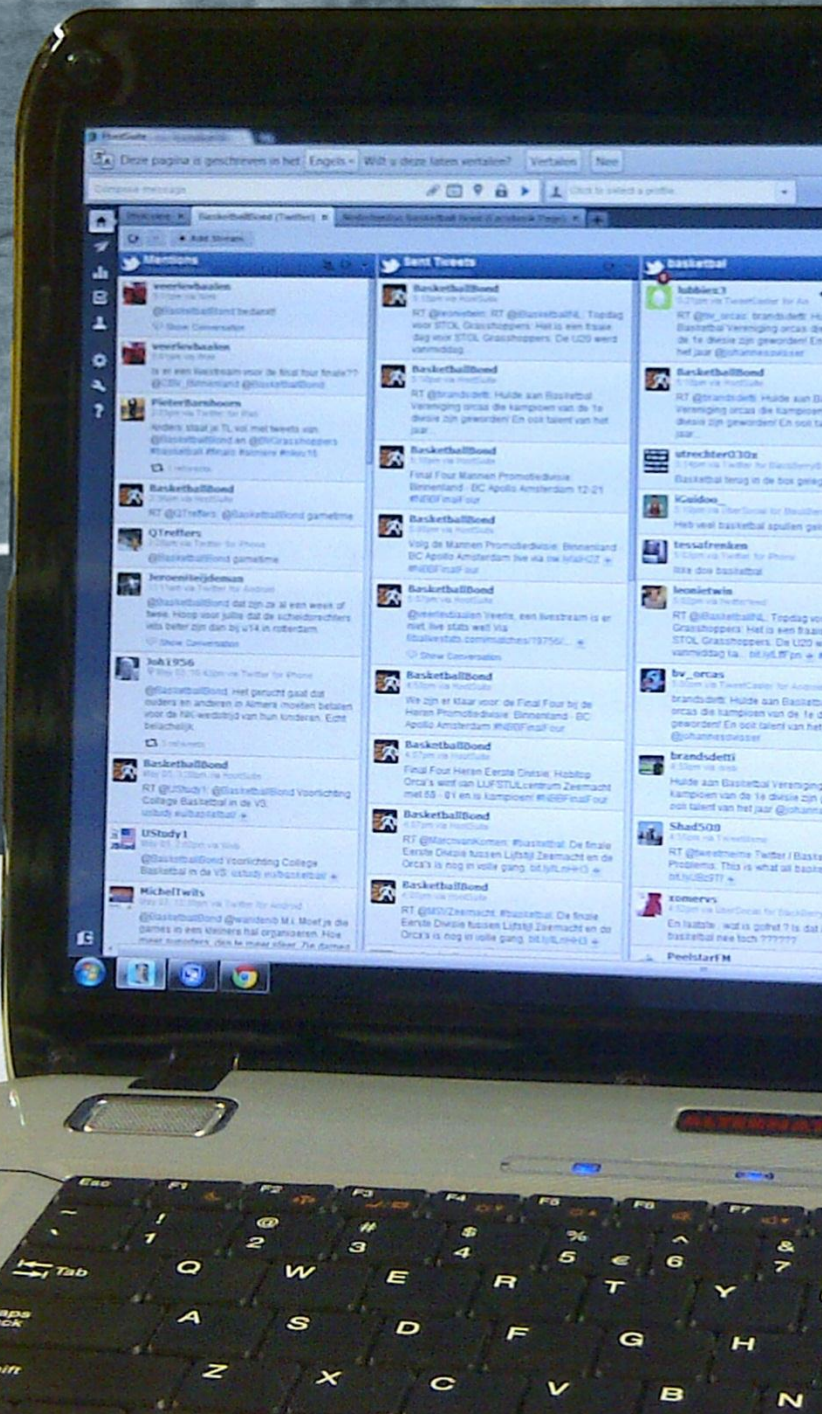


Tweet, Like and Play Basketball



Master Thesis

Erwin Westveer

“How does content marketing thru different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”

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Table of content

Abstract	8
1. Introduction	9
1.1 Background information	10
1.1.1 Fans and Followers	10
1.1.2 Key market players	10
2. Theory	14
2.1 Topic	14
2.2 Research Question	18
2.3 Conceptual Model	19
2.3 Hypothesis	22
3. Data and methodology	25
3.1 Independent variables	25
3.1.1 Events	25
3.1.2 Time of publication	27
3.1.3 Type of Content	28
3.1.4 Type of post	28
3.1.5 Source of the content	28
3.2 Moderating variables	29
3.2.1 Type of Media	29
3.3 Control Variables	29
3.3.1 Type of users	29

3.4 Data cleaning	30
3.5 Statistical tools	31
3.6 Methodology	31
3.6.1 Hypothesis 1: Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception	32
<i>3.6.1.1 Expected conclusions</i>	32
3.6.2 Hypothesis 2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.	33
<i>3.6.2.1 Expected conclusions</i>	33
3.6.3 Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.	34
<i>3.6.3.1 Expected conclusions</i>	34
3.6.4 Hypothesis 4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.	35
<i>3.6.4.1 Expected conclusions</i>	35
3.6.5 Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3	36
<i>3.6.5.1 Expected conclusions</i>	36
3.6.6 Hypothesis 6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H2.	36
<i>3.6.6.1 Expected conclusions</i>	36
3.6.7 Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.	37
<i>3.6.7.1 Expected conclusions</i>	37

3.6.8 Hypothesis 8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.	38
<i>3.6.8.1 Expected conclusions</i>	38
4. Results	39
4.1 Testing the hypotheses by linear regression	39
4.2 Hypothesis 1: Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception	48
4.3 Hypothesis 2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.	49
4.4 Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.	50
4.5 Hypothesis 4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.	51
4.6 Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3	52
4.7 Hypothesis 6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H2.	53
4.8 Hypothesis 7: Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.	55
4.9 Hypothesis 8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.	57

5. Discussion	58
6. Conclusion	59
7. Implications	60
7.1 Theoretical implications	60
7.2 Managerial implications	62
8. Limitations	64
8.1 Theoretical limitations	64
8.2 Managerial limitations	64
References	66
Appendices	71
Appendix 1: Social Media Ranking by Rankingz June 22 2012	71
Appendix 2: Social Media Ranking by Rankingz February 1st 2012	73
Appendix 3: Hypothesis 1: Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception	74
Appendix 4: Hypothesis 2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.	75
Appendix 5: Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.	76
Appendix 6: Hypothesis 4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.	77
Appendix 7: Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3.	78
Appendix 8: Hypothesis 6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H2.	79
Appendix 9: Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.	80

Appendix 10: Hypothesis 8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.	81
Appendix 11: Managerial Do's and Don'ts	82

Abstract

This study was part of my cooperated internship between the master Economics and Business specialization Marketing of the Erasmus School of Economics and the Dutch Basketball Federation: “Nederlandse Basketball Bond” (henceforth: NBB). The main goal of this study was to answer the following question:

“How does content marketing thru different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”

This study was held from February 2012 until June 2012 and contains Social Media posts from the period November 2011 until May 2012. This study contains 1450 Social Media posts on the social network channel: Facebook.com/basketballbond and the micro blogging channel: Twitter.com/basketballbond these messages were posted by the NBB and are being analyzed to see in what kind of way the “fans” engaged with the information in the posts. Posting the types of content described in this study via these media channels (especially creating engagement), helped the NBB growing their virtual communities.

Growing their communities the NBB had a positive link with attracting more participants and spectators out of that. So one can say that the NBB can attract more participants and spectators by posting the content mentioned above and they mainly have to focus on creating engagement among the fans. Because engagement leads to the “biggest” increase in participants and spectators.

Content marketing effect the level of brand perception in a way, that the fans have different reactions on different types of content.

Using content marketing via different types of channels led the NBB from 1200 fans in their community (social network and micro blogging combined) on February 1st 2012 to a community with 2181 fans on the 6th of May 2012. So implementing content marketing led to a virtual community doubled in size in about two months and they gained more spectators and participants out of that. The implementation of the preliminary results of this study resulted in the fact that the NBB is the 2nd sports federation in Holland on social media, while basketball is the 21st sport in Holland based on number of members.

1. Introduction

This study was part of my cooperated internship between the master Economics and Business specialization Marketing of the Erasmus School of Economics and the Dutch Basketball Federation: “Nederlandse Basketball Bond”. The goal of this study is to explore, how to use the opportunities of social media for the NBB in a successful and academically proven way.

Via this internship it was possible to combine personal interest and my current education as a way to express myself and help the Federation with developing and shaping their Social Media strategy.

Besides that and due to my bachelor in Sports Marketing & Management I was always interested to see the marketing part of sports and how fans do react on marketing and communication actions of several sports teams and sports brands.

This sports marketing issue combined with the upcoming relevance of social media resulted in this study.

This study was held from February 2012 until June 2012 and contains Social Media posts from the period November 2011 until May 2012. In this study 1450 Social Media posts on Facebook and Twitter posted by the NBB are being analyzed to see in what kind of way the “fans” engaged with the information in the posts.

This study helped the NBB to develop a Social Media strategy which turned out to work really well. The start of this strategy is also applied during the study. This helped the Federation to gain from the 35th spot in an Social Media competition, based on the “Klout” score, (held by “rankingz.com) among Dutch sports federations in February to the 2th spot in this same competition in June. All the major sports federations of Holland are involved in this competition, but they have to admit that the NBB has a good strategy, which is based on this academic study.

To illustrate: Basketball is in Holland only the 21st sport based on number of federation members and it also isn’t in the Top 10 of best Dutch sports federations based on their

“brand power”¹. But on Social Media it only cannot compete with the Dutch Football Federation, which has 10 times the number of members of the NBB. Based on these small facts one can say that the Social Media strategy fully based on this academic study is a successful one.

1.1 Background information

1.1.1 Fans and Followers

The main focus of this study is on the fans of the Facebook account: “basketballbond” and on the followers of the Twitter account: “@basketballbond”. These are mostly people who live in the Netherlands and are actively interested in basketball, basketball news or activities by the NBB.

The focus of the strategy which will be made out of the results of this study is to attract all the 40.000 members of the NBB in Holland, as well as other basketball fans, mainly from Holland. The goal of this strategy is to create a Social Media platform where Dutch basketball fans can interact directly with each other, but also with the Federation.

It will also offer the opportunity for the Federation to get directly in touch with their members and fans, instead of via the clubs where these members play. This direct interaction with its fans gives the Federation the opportunity to tailor their Social Media activities to the specific needs of their fans in order to get more fans to the basketball games or to get more participants to the events organized by the NBB. The reactions from these people on the stated Social Media channels were gathered as the data for this study. This study analyzes their user generated data on the stated channels in the period of November 2011 until May 2012.

1.1.2 Key market players

The NBB is not the only player who wants to attract its fans and members to its Facebook and Twitter pages. The Dutch basketball magazine iBasketball and the Dutch site USA Sports are also trying to attract the members and fans of the NBB to their Social Media Pages. Their “fans” are mostly the same people that the NBB want to target.

¹ marketingtribune.nl, 22 June 2012

Besides that, the NBB has to compete with other Dutch sports federations, such as the KNVB (Football/Soccer), KNHB (Field Hockey), NeVoBo (Volleyball), KNSB (Ice Skating), KNZB (Swimming), BN (Badminton), NIJB (Ice Hockey), AFBN (American Football), NTTB (Table tennis) and the NHV (Handball).

This study provides the key for the NBB to “win the challenge” against the social media channels of other sports federations. To illustrate, these are the numbers of the NBB on Social Media before the start of implementing the initial results of this study on the 1st of February 2012:

Nederlandse Basketball Bond on Social Media	
Facebook pages	Basketballbond
Number of Facebook fans	400
Twitter pages	@basketballbond
Number of followers on Twitter	800
Place in the Social Media ranking of sports federations by Rankingz.com	35
Average buzz in one week	0
Klout - score	25

During this study the NBB started to implement the results of this study little by little, these are the results until the 22th of June 2012.

Nederlandse Basketball Bond on Social Media	
Facebook pages	Basketballbond and streetballmasters
Number of Facebook fans	1374
Twitter pages	@basketballbond
Number of followers on Twitter	1402
Place in the Social Media ranking of sports federations by Rankingz.com	2
Average buzz in one week	1207
Klout - score	56

One can say that the number of fans increased because of the extra Facebook page, but the “streetballmasters” page is not included in this study because it is better to see how the original pages have developed because of this study’s results.

To see if the results of this study resulted in good results compared to other sports federations a table is drawn below.

The NBB is compared with the following Sports Federations: KNVB, KNHB, NeVoBo, KNSB, KNZB, BN, AFBN, NTTB and the NHV. These Federations are chosen because they have bigger accounts on Facebook and Twitter (KNVB), because they have heavily invested in Social Media (KNHB, NeVoBo, KNZB)², because it is a typically Dutch sport (KNSB) and the NTTB, BN and the NHV are chosen because they have a similar number of members. The AFBN is chosen because it is an “American Sport” just like basketball.

The table contains the relative differences over time from the period February 1st 2012 until 22 June 2012

#Sportbonden on Social Media // Performance over the period February 2012 - June 2012						
Federatio n	NBB	KNVB	KNHB	NeVoBo	KNSB	KNZB
Facebook ³	+243,5 %	+23,8%	+33%	+33%	+41,8%	+4,9%
Twitter ⁴	+75,3%	+105%	+45,3%	+45%	+25%	+27,2%
Ranking ⁵	+33	+/- 0	-3	+/- 0	-17	-4
Buzz ⁶	+1207 %	+680%	+466%	+51%	-61,5%	-3,7%
Klout - score ⁷	+24%	+16%	+4,7%	+17%	+/- 0,0%	+4,7%

² According to small conversations with other Sports Federations

³ Difference in number of Facebook fans

⁴ Difference in number of Twitter followers

⁵ Difference in spots in the Social Media Raking of Sports Federations by Rankingz.com

⁶ Number of times that the Federation is stated on Facebook and Twitter by people/fans

⁷ The Klout Score measures influence based on your ability to drive action. Every time you create content or engage you influence others.

#Sportbonden on Social Media // Performance over the period February 2012 - June 2012					
Federatio n	NBB	BN	AFBN	NTTB	NHV
Facebook	+243,5 %	+/- 0,0%	+/- 0,0%	+/- 0,0%	-2644%
Twitter	+75,3%	+141,4%	+44%	+20%	+43%
Ranking	+33	+6	-12	-2	-23
Buzz	+1207 %	-9,35%	+44%	+946%	+97%
Klout – score	+24%	+18%	+/- 0,0%	+8%	+20%

As stated in the tables above, the results of this study helped the NBB to reach the second place in the “#Sportbonden” ranking. They gained 243,5% extra Facebook fans and 75,3% extra Twitter followers, but not only the reach improved. The followers where activated and are now actively involved by the NBB via Social Media, the Buzz grew with 1207% in the last four months, so one can say that the results of this content study had a great impact on the involvement of the “basketball population” in the Netherlands. This result was measured in a Klout-score and resulted in the face that the NBB became the second best sport federation on Social Media in Holland on June 22 2012.

2. Theory

2.1 Topic

“How does content marketing thru different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”

These days Social Media and its development has a major impact on the relationships of brands and their fans (van der Velden, 2009). According to the Social Media Monitor (van der Velden, 2009) brands are increasing their activity on popular social networks. One of the reasons that companies choose to use social media is because they want to share information. This reason can also be called content marketing (Pulizzi, 2010). Content marketing is a technique used in marketing. It is about creating and distributing relevant and valuable content to acquire, attract, and engage a target audience which is clearly defined and understood - with the objective of driving profitable customer action. So one can say that content marketing is about communicating with your customers or potential customers without selling them your products. Instead of selling products directly, firms tend to offer useful and relevant information additional to their products (Pulizzi, 2010). Content marketing is an upcoming trend in marketing during the past years (Pulizzi, 2010).

Using social media and content marketing for companies is a crucial part of making consumers aware of them, because it gives the opportunity to profile itself among its customers (Schumann & Thorson, 2007). Nowadays, consumers turn to the internet to get information about companies and their products instead of the Yellow Pages and printed media (Schumann & Thorson, 2007). Therefore it is getting more and more difficult to influence consumers through “unwanted” marketing expressions. Therefore, companies raise their expenses on social media expressions and content marketing to reach potential customers (Pulizzi, 2010). By offering relevant and useful information to the consumers via content marketing, the opportunity raises for marketers to engage with their consumers (Schumann & Thorson, 2007) (Pulizzi, 2010).

This study tries to answer the question how different kinds of content (content marketing) can result in a higher level of brand perception among fans and how to get more spectators and participants out of that.

As social media is one of the most important media to spread content among consumers, it has been chosen here as field of study. Because of the fact that companies such as the NBB struggle with using social media effectively, the purpose of this study is to create useful insights for the use of social media in an effective way to create useful interactions with their consumers and fans.

This study will provide (sports) marketers useful insights which content to use for the goals they want to achieve. To answer the research question, which has been mentioned at the beginning of the paragraph, it is necessary to have a look at the content (which is posted on social media). As mentioned earlier this research takes multiple types of content into account which makes it necessary to take a deeper look at content marketing. Content marketing is an umbrella name for all expressions which distribute useful and relevant information (among the consumers). Content marketing can be split into multiple genres of communicational forms according to the Genre Theory (Yates & Orlikowski, 1992). The goal of making different content genres is that genres has to be constructed and recognized in a good way through society (Yates & Orlikowski, 1992). Every type of genre can be recognized because of its characteristics goal, content and shape (Orlikowski & Yates, 1994).

To get a complete overview of all useable content marketing genres within social media, different types of content marketing have to be defined. Within the content marketing there are 42 different types according to Pulizzi (2009). Of those 42 types only 21 can be used within social media, according to the definition of social media. (Boyd, 2008)

“Social Media” [...] is an umbrella term that refers to the set of tools, services, and applications that allow people to interact with others using network Technologies. [...] The way these tools are used alters a plethora of practices, including communication, collaboration, information dissemination, and social organization. [...] Social media includes systems that support one-to-one, one-to-many, and many-to-many interactions. Some enable many-to-many interactions and support the creation of spaces for people to gather and publics to form. [...] Social media encompasses groupware, online communities, peer-to-

peer and media-sharing technologies, and networked gaming. Instant messaging, blogging, micro blogging, forums, email, virtual worlds, texting, and social network sites are all genres of social media. (p.92)

These 21 types of content are:

Types of content which can be used on Social Media according to Boyd, 2008.

Consumer focused communities	e-learning initiatives	Wiki
Firm focused communities	Videos	Micro blogging
Facebook apps	Webcasts	Facebook movements
Online games	Online Publications	Content platform
Blogs	Online Newsfeeds	Photo platform
Video Blogs	Social Bookmarking	Online Media Website
Testimonials	Virtual Reality	Own customized Social Network

These 21 content types are useful to use in social media, but there also have to be cues to convince consumers. According to Cialdini in Dainton & Zelle, 2005 content marketing is about convincing consumers. There are 7 types of cues to convince consumers: authority, commitment, contrast, likability, giving and taking, scarcity and social prove. These seven cues to convince consumers are subjective; they can be summarized as “subjective content marketing”.

There also is an eight cue: argumentation which is about informing the consumer. This can be stated as “objective content marketing”.

Besides defining content marketing genres it is important to rank them in a hierarchy (Crowston & Williams, 2000). This hierarchy will give marketers a better overview of what type of content they could use for what type of purpose. In this study, there are three main purposes stated to use the content for: building awareness, creating engagement and letting the fans spread the word. These three purposes can be stated as levels of brand perception (Hoffman & Fodor, 2010).

According to Petty and Cacioppo, the consumers will like visual post when the involvement among the consumers is low, because of the alternative of processing information. (Petty and Cacioppo, 1994) and according to Li and Bernoff (2008) only 20% of the Dutch social media users has a high involvement on social media. Based on these facts, it can be stated that visual content is the best way to create a high level of brand perception. Also user generated content can be perceived as successful content to reach a better brand perception because content about brands is perceived more honest when it is not marketing driven (Grace & O’Cass, 2005).

The main purpose of this study is to create content and use this via social media channels to attract fans to these channels in order to build a virtual community around the NBB and around Dutch basketball. A virtual community can be characterized as: *“A community for people with shared interest for whom online and electronic communication is a primary form of interaction”* (Dennis, Pootheri, & Natarajan, 1998). Also a virtual community can reduce the distance between people with the same interests (Kilsheimer, 1997). This offers the NBB the option to also attract people for its community who do not live in the Netherlands.

A virtual community can also be a community for groups of people who meet regularly to discuss a subject of interest with all members (Figallo, 1998), this insight also matches the insight of the NBB because all the fans have the same interest: (Dutch) basketball. That this community is called “virtual” is because the primary interaction is enabled by technology. This computer-mediated-communication can allow fans to talk directly to others with the same interests and they are forming so-called virtual communities (Hiltz & Wellman, 1997). It could also lead to personal relationships when people discuss long enough in this virtual community (Rheingold, 1993).

Another part of the definition of a virtual community is the frequency in which fans will participate in it. Most of the times, fans get attached to their (virtual) communities and therefore visit them frequently (Hiltz&Wellman, 1997), sometimes people get addicted to it (Hiltz, 1984) This offers the NBB the opportunity to get a group of very fanatic and close group of fans, who are easily reachable for the federation.

The definition of a virtual community that is used for this study is from Ridings et al. (2002):

“Groups of people with common interests and practices that communicate regularly and for some duration in an organized way over the Internet through a common location or mechanism.”

Fans also like to belong to a community because, people want to be part of a larger social group (Figallo, 1998). Psychological studies show that people have the need to be affiliated with others and belong to something (Watson&Johnson, 1972). Communities and groups also provide individuals with information (Watson&Johnson, 1972). This last point is interesting for the NBB, the members of this federation always said that the NBB was lacking in giving information to their fans and members.

Besides that, people want to have an own social identity and by becoming part of the community they can express themselves and connect themselves with the values, attitudes and the behavioral intentions from the imagined social groups, according to the social identity theory (Hogg, 1996; Tajfel, 1978; Turner, 1978, 1985). These motivations to join normal groups and communities can be extended by joining virtual groups via social media.

2.1 Research Question

This applicable study had to be useful for both the Erasmus School of Economics and the Dutch Basketball Federation NBB.

This study with multiple ways to interpret the background information had to be framed into an applicable study. The problem for the NBB is that they wanted to grow on their Social Media channels, but they didn't know how to do it and especially which content leads to a better brand perception among the fans. This increase in brand perceptions has to result in more participants and more spectators during the NBB events.

Therefore, there has been chosen for this central research question:

“How does content marketing thru different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”

2.2 Conceptual Model

In order to answer the research question stated above a conceptual model is drawn below. It was important to look at different types of content which are posted via different Social Media channels. The NBB only used Facebook, YouTube, Twitter and Hyves (a Dutch social network site) as its Social Media channels.

The meaning of a Social Network site in this study is given by Boyd&Ellison (2007):

“We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.”

To clarify the definition further and avoid confusion with “Social Networking sites” Boyd & Ellison make the distinction as follows:

“While we use the term “social network site” to describe this phenomenon, the term “social networking site” also appears in public discourse, and the two terms are often used interchangeably. We chose not to employ the term “networking” for two reasons: emphasis and scope. “Networking” emphasizes relationship initiation, often between strangers. While networking is possible on these sites, it is not the primary practice on many of them, nor is it what differentiates them from other forms of computer-mediated communication (CMC)”.

The NBB focusses itself on “social network sites” because the fans share a connection with each other and the community is meant to share stories and experiences about the “shared connection” but it isn’t specially shaped for “networking”.

This study focuses on the Social Network site Facebook and the micro blogging site Twitter, because these virtual communities were the most active ones when the research started.

For the goals of this study enterprise micro blogging is defined as the following description by Böhringer & Richter, 2009:

“Enterprise micro blogging is technologically supported interpersonal interaction utilizing short information snippets within a separated information space (i.e. company, department, project) in order to create informal, social, group-structural, and workspace awareness.”

The YouTube channel was also very much used by the organization, but more as a tool to get videos online and not as an online community. The NBB used to use YouTube to upload videos and they shared the YouTube videos via Facebook (and Hyves). For the purpose of this study, the content is split into multiple categories. The main goal is what to post on which channel and when is this the most effective to reach a certain goal. In the conceptual model the source of the content is divided into two categories: Firm created content and Fan created content. This is done because of the fact that user generated content about brands is more likely to increase brand perception among followers because it is not marketing driven from the company and therefore it is perceived as more honest content according to a study by Grace & O’Cass in 2005.

A split is also made in the type of content into photo posts, text posts and video posts which are posted live (during games and events) or not live. This is done because visual content is more likely to be seen as favorable content because for the most people on social media the involvement level is low (Li and Bernoff, 2008) and therefore they will prefer visual content (Petty and Cacioppo, 1994). Besides that there is a split in content created real-time during games and event held by the NBB, so called “live content”. This is done because people can react real-time on some content and the NBB expects that there will be more reactions on the real-time created content.

These splits in types of content are supposed to result in different levels of brand perception. This study uses the following definition for brand perception:

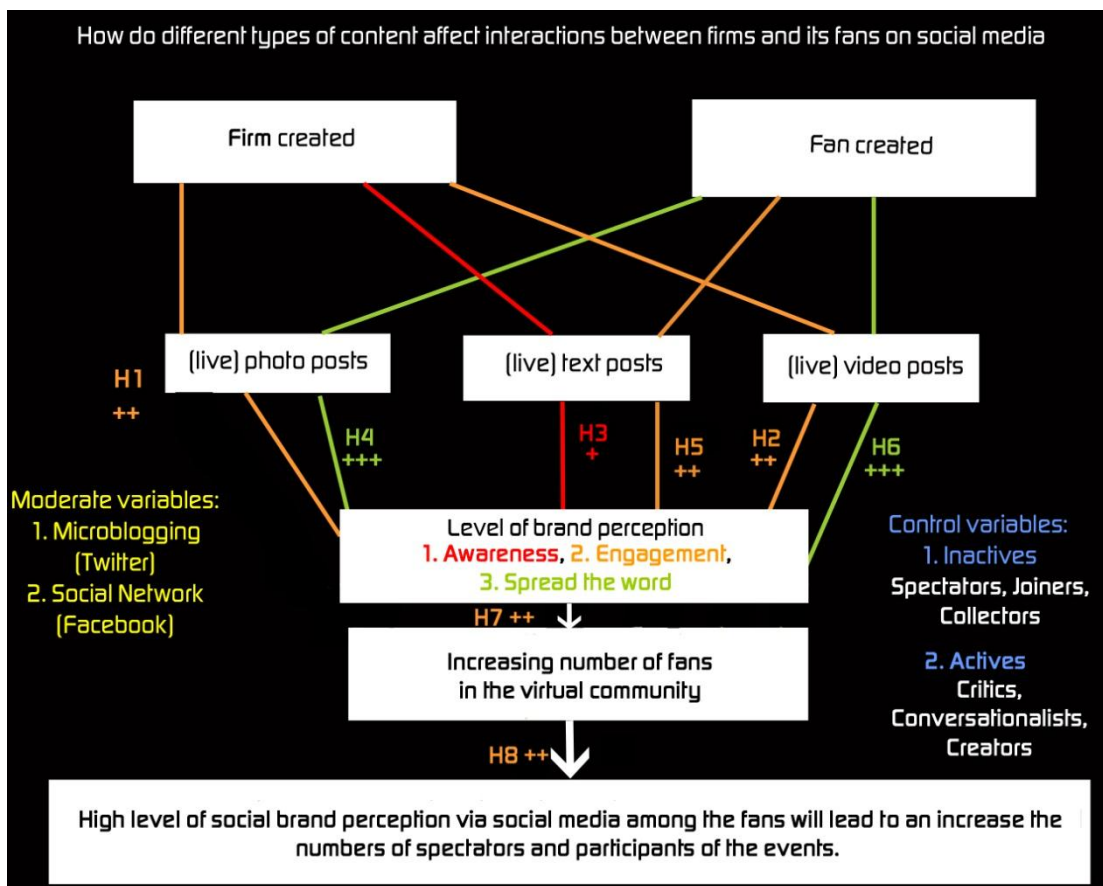
“The impression in the consumers' mind of a brand's total personality (real and imaginary qualities and shortcomings). Brand image is developed over time through advertising campaigns with a consistent theme, and is authenticated through the consumers' direct experience.”⁸

⁸ www.businessdictionary.com (20 - 06 - 2012)

In this study are three “levels” of brand perception used: awareness, engagement and spread the word. These “levels” are ordinaly ranked from low to high according to Hoffman & Fodor (2010). They measure the “Return on Investment” of the content used on Micro blogging and the Social Network site by the NBB. In this study is tested if a higher rate of brand perception among the fans leads to more fans and followers in the virtual community and after that is tested if the increase in number of virtual fans increases the number of spectators and participants during events of the NBB.

The effects of the reactions on the posts are expected to be different for the Micro blogging and the Social Network, therefore these platforms will be used as the moderating variables in this study. Besides these moderating variables there are also different types of social media fans (Li & Bernoff, 2010). While Li & Bernoff split social media fans into 7 categories, in this study the fans are categorized into two groups: the in actives (which contains the following types of users of the theory by Li & Bernoff: Spectators, Joiners and Collectors) and the actives (which contains the Critics, Conversationalists and the Creators derived from this same theory).

To get a good (visual) overview of the thesis the conceptual model is drawn below.



2.3 Hypothesis

According to Petty and Cacioppo the consumers will like visual post when the involvement among the consumers is low, because of the alternative of processing information. (Petty and Cacioppo, 1994) and according to Li and Bernoff (2008) only 20% of the Dutch social media users has a high involvement on social media. In extension to the low involvement rate it is also about the speed of processing the content (Carlson, 2009) because one picture says it all. She states that visuals are always more effective than texts because people tend to stop for the images instead of reading boring words. Besides these facts the Media Richness Theory by Daft and Lengel (1984) states that “the richer the media, the more effective the content is”. Gaining a better brand perception via social media it also is about simplicity and brevity, include one key point per message (Lockwood, 2012). In case of this research that will result in the fact that visual content will result in higher levels of brand perception. Also according to Brookes (2010) visual posts on the social network of Facebook will lead to 22% more engagement on Facebook. Another study of this author found out that picture content is that most “talked” about on Facebook (Brookes, 2011).

This results in the first hypothesis:

- **H1: Posting unique firm-created (live) photo’s via social media will lead to a high level of social brand awareness**

As stated above visual content on social media leads to a better perception than text posts (Daft and Lengel, 1984; Li and Bernoff, 2008; Carlson, 2009; Brookes, 2010). It is also increasing in numbers, but more important it is transforming social media (Allen et al, 2012). Social media is also proven to be the most effective way to improve your brand awareness, consideration and perception (Reeves, 2010).

In extension to this video content is the content used most by content marketers via social media (Reeves, 2012) and second best “talked about” on Facebook (Brookes, 2011).

According to Brookes (2010) video content leads to 22% less engagement on Facebook compared to image posts, but video content lead to 27% more engagement on than texts.

This results in the second hypothesis:

H2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand awareness.

Text messages via social media will lead to a lower level of social brand awareness because people only remember 10% of what they hear and 20% of what they read, but about 80 percent of what they see and do (Lester, 1994-1996). Also is given that 83% of human learning occurs visually (U.S. Department of Labor, OSHA Office of Training and Education, 1996). Therefore the text posts will lead to brand awareness because it contains relevant information for the followers, but the followers will not pick up a high level of brand awareness because it is written. Written content could also not capture emotions while visual content can. It also is more easily to pick up the context of the content and to recall it (Carlson, 2009). But according to Petty and Cacioppo the consumers will like text post when the involvement among the consumers is high, because of the central route of processing information. (Petty and Cacioppo, 1994). Besides that text content is also less natural than visual content and therefore it is less effective, according to the Media Naturalness Theory (Kock, 2004). Text content on Facebook will lead to 27% less engagement than video content and 54% less engagement than photo content (Brookes, 2010).

This leads to hypothesis 3:

- **H3: Posting unique firm-created (live) texts will lead to a low level of social brand awareness.**

The reasons mentioned earlier and the facts that user generated content about brands is more likely to increase brand perception among other followers because it is not marketing driven from the company and therefore it is perceived as more honest and trustworthy content (Grace & O’Cass, 2005; Digital Visitor, 2012). It can also be perceived as more personal and genuine (Pan et al. 2007; Wenger 2008; Digital Visitor, 2012). The content is also perceived as richer content and therefore it enhances the aesthetics of your page. It will also increase the interactivity of the page and therefore into an increase in browsing time on your site or page (Digital Visitor, 2012). This will lead to the following 3 hypothesis:

- **H4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand awareness than the level of H1.**

- **H5: Posting unique fan-created (live) texts will lead to a higher level of social brand awareness than the level of H3**
- **H6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H5.**

When content marketing is used in a right way it results in company awareness and trust among its consumers, this awareness and trust will result in a more favorable attitude towards buying the brands products. The existence of brand awareness and trust is important because it significantly decreases the will of the consumer to stop engaging with a brand (Morgan & Hunt, 1994). This would be the kind of behavior in case of lack of brand awareness and trust. Brand awareness and trust is a key variable in the development of a long lasting firm-consumer relationship (Morgan & Hunt, 1994) and is also been seen as one of the most sought qualities of a relationship (Delgado-Ballester, 2001). When attractive and interactive content is leveraged by other users it will increase your online visitor loyalty. Due to this increase in visitor loyalty it can turn to an online community (Digital Visitor, 2012).

In order to build a good relationship it is important to create buying loyalty and attitude loyalty, besides brand awareness and trust, among the consumers (Um, 2008).

This results in the seventh hypothesis:

- **H7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.**

This buying loyalty can result in increasing market share and attitude loyalty can result in a higher price for the products (Um, 2008)

Even more people are joining the virtual community on social media, it is expected that this will result in a higher number of spectators and participants at NBB events. It is also proven that 60% of the followers on social media are more likely to purchase that specific brand (Van Bregt, 2012). This because people do want to experience and consume the events before the purchase takes place (Senecal and Nantal 2004).

This results in the eighth and final hypothesis.

- **H8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.**

3. Data and methodology

The data which is used for this study are all posts that the NBB posted in its social media channels in the period from November 2011 until May 2012. These posts are specially gathered for this study in the period from February 2012 until May 2012. This was because all the earlier posts were deleted from the micro blogging channel.

The data consists of 1448 messages which are posted on the two social media channels: the social network Facebook (www.facebook.com/basketballbond) and on the micro blogging channel Twitter (www.twitter.com/basketballbond). These 1448 messages also contain mentions to @basketballbond and re-tweets via @basketballbond on micro blogging. The data is split up into 1068 Tweets (micro blogging posts) and 380 posts (social network posts). This is necessary in order to get an good overview of which kind of content the fans like on these channels, but also to exclude (or at least minimize) coincidences in the data.

3.1 Independent variables

3.1.1 Events

Also the large number is because of the fact that it has to be used as part of a social media strategy by the federation and because of the various events and target groups for the federation the results could differ. Therefore, there is chosen to include various events into this study to see how the reactions on the posts about different types of events are.

Not only different events are chosen to communicate about. A laboratory like situation is simulated by posting various types of content about the same events and on both of the channels to see the differences in levels of brand perception. Also different events are used for more or less the same messages to see how the (type of) event influences the level of brand perception.

The “events” that are being used in this study to see the difference in brand perception are:

- **Basketball Days:** an international friendly basketball tournament which is being held in December in Zwolle, Holland. Each year they invite teams from over the world to show off their talents.
- **Dunkers Kids Club** events: the Dunkers Kids Club is the official kids club of the NBB. The NBB organizes clinics and tournaments for the youth below the age of 12 throughout the whole country. The kids club is named after “Dunker”, which is the official mascot of the NBB.
- **Dutch Basketball League:** this is the highest professional club competition for men in Holland.
- **Final Four:** these are all the finals of the Dutch amateur competitions and professional youth competitions. They are played centrally in Almere in one weekend at the end of March.
- **“Oranje Fever” male:** these are all the home games for the Dutch men’s national team in the European Championship qualification. In these games the best male basketball players from Holland are selected to play in the team and compete with other European national teams.
- **NBB Beker:** this is the national cup tournament, besides the national competitions – the “Dutch Basketball League”, the “Vrouwen Eredivisie” and the “Jeugd Eredivisie” – the teams have another chance to win a national prize, the “NBB Beker” which is the national cup tournament. This tournament is played for both male and female in all age categories from 14 years and under until the seniors.
- **NBB Camps:** the NBB Camps are the national youth camps held by the NBB. During these camps, kids in the age of 8 until 20 years get the opportunity to train with the best coaches Holland has to offer. These camps are held in Valkenswaard for the first time ever, after years in Elst and Papendal.
- **Nationale Jeugd Kampioenschappen:** these are the national championship finals for the youth teams in the age of 10 to 16 years old, for both male and female. These are usually held in Almere, but they took place in Rotterdam this year.

- **Nationale Jeugd Teams:** these are the national youth selections for both male and female in the ages up to 22 years old. These messages are about all the games, stages and tournaments for the Dutch national youth team all over the world. In these games the best basketball players per age category from Holland are selected to play in the team and compete with other national teams.
- **Oranje Fever female:** these are all the home games for the Dutch women's national team in the European Championship qualification. In these games the best female basketball players from Holland are selected to play in the team and compete with other European national teams.
- **Rollers:** these posts are about all the wheelchair basketball activities by the NBB. This differs from clinics of the national team players at amateur clubs in the country till the "rollers" cup finals and their games as preparation for the Paralympics Games in London.
- **Streetball:** this is a special kind of basketball, instead of 5 against 5 like normal basketball, streetball is being played 3 against 3. Also it is played on a half court instead of full court, besides that it is played outdoors instead in indoor. The target audience is mostly younger and more urban than the usual basketball fans.
- **Vrouwen eredivisie:** This is the highest professional club competition for women in Holland.
- **FIBA World Cup Woman U17:** This is the World Cup for Woman in the age of 15-17 years, which is organized by the NBB and will take place in Amsterdam this August.
- **NBA:** these are post items about the biggest basketball competition in the world the American NBA.

3.1.2 Time of publication

In this study is chosen to differ in multiple moments for posting messages, to see the connection between the moment that the message is posted and the level of brand perception. Therefore the moment of the posts are split into four categories: no time restriction, before the event, live during the event and after the event.

This is done because of the increasing number of people who use “second screen” technologies in sports. This is an interactive “platform” where fans can see the hidden layers in sports, they can also interact and discuss with each other about sports events. Social Media is very often used as a second screen among fans. Because of this need it was expected by the NBB that real-time created content would result in a better brand perception.

3.1.3 Type of Content

This study contains posts with different kinds of content because the involvement of the fans on social media will be low in 80% of the cases (Li and Bernoff, 2008) and because of this low involvement people would prefer visual content over text according to alternative way of processing information according to the Elaboration Likelihood Model (Petty and Cacioppo, 1994). Besides that videos should attract people more on social media, especially with sports related content, according to the NBB. Therefore different kinds of content are posted during this research.

3.1.4 Type of post

During this study different types of messages are posted on the social media channels of the NBB. Some messages were only indicating an event, while others encouraged the fans to give their input. Therefore the messages can be categorized into four categories: indicating that an event is coming up (just only announcing the event, without any form of extra information or content), news messages (informing the fans about the latest basketball news in one of the sixteen categories stated above. This split in types of messages is to see if the type of message has some influence on the level of brand perception among the fans.

3.1.5 Source of the content

For the purpose of this study is chosen to use different sources for the content: firm created content, fan created content and content created by other site. The NBB wanted to see the differences in firm created content and content copied from other sites (basketball minded sites). Also it is proven that fan generated content is much more likely to increase the brand perception, because it is perceived as more honest content (Grade & O’Cass, 2005)

3.2 Moderating variables

3.2.1 Type of Media

To see the difference in effects there is chosen to include channel type as a moderating variable.. The fans and followers of these channels should react differently on the messages posted by the NBB, because of the differences in usage of these mediums. For example micro blogging is mostly used via smartphones and they are more likely to be aware, engage or spread text messages because one can only use 140 characters to inform their Twitter followers. On the other hand more visual post should work better for the social network site of Facebook, because Facebook users should earlier engage with short texts with visual content like photos and videos.

3.3 Control Variables

3.3.1 Type of users

The fans that follow the NBB on social media can be divided into seven groups according to Li & Bernoff (2010) in their study of the Groundswell. They describe seven types of social media fans: creators, conversationalists, critics, collectors, joiners, spectators and in actives. To use these groups in this study it is helpful to explain how they are segmented (Li & Bernoff, 2010). This is done below:

Creators: fans who upload at least once a month content (videos, photos, sounds, texts, blogs or other articles) on webpages or on YouTube. In Holland 23% of the social media users is a creator.

Conversationalists: these fans take part in dialogues on the social media updates (on Facebook or Twitter), they do this at least once a week. This will count for around 31% of the social media users.

Critics: they react on online content of other people, or they post reactions on blogs, online forums or they make reviews about products or matches, they do this at least once a month. This counts for 25% of the Dutch social media users.

Collectors: they collect URL's and tags of different sites and place these on social - bookmarking services or in social media communities. This group is a select group of only 7% of all the Dutch users.

Joiners: these fans create their own profiles on social media sites like Facebook and update them regularly to express themselves. This group is the fastest growing group and exists out of 33% of the social media population.

Spectators: these fans "consume" the content which is created by the social media users stated above, but they do not produce anything. This is the biggest group of them all with 52% in Holland.

In actives: these are the Dutch basketball fans that have access to internet and use this for their own purposes but not for social technologies like micro blogging and social networks. This counts for 36% of the Dutch internet users.

For the purpose of this study only six of these seven categories are used, the in actives were left out because they do not participate in the "groundswell". In this study the six groups are not used as six standalone groups to "control" the outcomes of this study. These six groups are clustered into two outcome variables: the actives (which contains the Creators, the Conversationalists and the Critics) and the in actives (which contains the Collectors, the Joiners and the Spectators).

This split in different types of users is made because of the fact that the "active users" create content in the community or react visibly on content in the community and the "inactive users" do not publish any created content in the community.

3.4 Data cleaning

For the research on this hypothesis the program SPSS is used to analyze the dataset. The data was first of all cleaned, the rare events (events who only took place once, or events with not much publications about it) were "cleaned" out of the data. Also the number of people who showed awareness, engagement and the number of people who spread the word about these posts were coded in SPSS. These were coded into dummies for the effect which took place the most.

For example, when a post resulted in 120 fans who were aware of the post, 66 fans who engaged with the post, and 45 fans who spread the word about this post then it was coded that this post resulted into awareness. Although this post also resulted in higher levels of brand awareness only the strongest effect counted.

3.5 Statistical tools

A linear regression was done on the data, with the level of brand perception as dependent variable, the types of content, types of posts, time of publication, the source and the events as independent variables. The reason that is chosen for the linear regression is that the regression provides a single trend (so the outcome is easier to interpret for the purpose of this study), the errors in the sum of squares is minimized (therefore the fit of the model is better) and the outcomes are consistent (the outcomes can be explained in one way and are therefore more clear).

3.6 Methodology

This paragraph discusses the methodology which is used to come to the results of this study.

There are eight hypothesis formed which answer parts of the main question of this study:

“How does content marketing thru different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”

These hypothesis are described with a table of variables per hypothesis and the expected outcomes per hypothesis based on the literature and the opinions of the people of the principal of this research: the Dutch Basketball Federation: NBB. The tables of variables show the links are tested in the statistics program SPSS.

3.6.1 Hypothesis 1: Posting unique firm-created (live) photo's via social media will lead to a high level of social brand perception

To see how this hypothesis is tested, the table of variables is stated in appendix 3 on page 74

3.6.1.1 Expected conclusions

The expectations before the start of this study were that due to the unique firm created photos spreading the word about the brand (a high level of brand perception) can be reached via social media. This means that the primary reactions on these photo posts will be shares on the social network of Facebook (Hoffman & Fodor, 2010) and re-tweets via micro blogging (Hoffman & Fodor, 2010).

This is expected because the NBB can make some exclusive footage during their events and therefore it will be the official pictures of the event. One can say that the NBB tries to convince the fans to engage with the content, with four of the eight cues to convince consumers:

- **Authority:** the NBB shows that they are the ones who are responsible for the organization of the given events, so they claim it as their events. This is done by placing banners, flags and posters around the places where the events take place. Also every member of the NBB wears shirts with the logos on it.
- **Commitment:** the federation shows commitment with the fans because they give the fans some little extra insights during their events.
- **giving and taking:** the NBB focusses to attract the attention of its fans to their content by giving them the content which they want to see, for example real-time game photos and other content.
- **Scarcity:** the NBB is the only company in the Netherlands who offers photo content of all official basketball tournaments (as described in chapter 3.1.1 Events).

Besides that fans will like visual posts (Petty and Cacioppo, 1994) because of the low level of involvement (Li and Bernoff, 2008). Because that the NBB uses four out of eight cues to convince the fans to connect with the photo and because of "mostly" serious content it is expected that firm-created photos will lead to engagement.

3.6.2 Hypothesis 2: Posting unique firm-created (live) video's will lead to a high level of social brand perception.

To see how this hypothesis is tested, the table of variables is stated in appendix 2 on page 75.

3.6.2.1 Expected conclusions

The expectations before the start of this study were that due to the unique firm created videos the highest level of brand perception can be reached: spread the word. This means that the primary reactions on these photo posts will be shares on the social network of Facebook (Hoffman & Fodor,2010) and replies and extra followers via micro blogging (Hoffman & Fodor,2010).

This is expected because the NBB can make some exclusive footage during their events and therefore it will be the official pictures of the event. One can say that the NBB tries to convince the fans to engage with the content, with five of the eight cues to convince consumers:

- **authority:** the NBB shows that they are the ones who are responsible or the organization of the given events, so they claim it as their events. This is done by placing banners, flags and posters around the places where the events take place. Also every member of the NBB wears shirts with the logos on it.
- **commitment:** the federation shows commitment with the fans because they give the fans some little extra insights during their events.
- **giving and taking:** the NBB focusses to attract the attention of its fans to their content by giving them the content which they want to see, for example real-time game videos and other content.
- **likability:** likability is used with the videos because sports can be best experienced on social media via videos, because of all the moving action.
- **scarcity:** the NBB is the only company in the Netherlands who offers video content of all official basketball tournaments (as described in chapter 3.1.1 Events).

Besides that fans will like visual posts (Petty and Cacioppo, 1994) because of the low level of involvement (Li and Bernoff, 2008).

Because that the NBB uses five out of eight cues to convince the fans to connect with the videos, videos are the best way to experience sports on social media and because of “mostly” serious content it is expected that firm-created videos will lead to spreading the word.

3.6.3 Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.

To see how this hypothesis is tested, the table of variables is stated in appendix 5 on page 76.

3.6.3.1 Expected conclusions

The expectations before the start of this study were that due to the unique firm created text, brand awareness (the lowest level of brand perception) can be reached via social media. This means that the primary reactions on these photo posts will be visuals on the social network of Facebook (Hoffman & Fodor,2010) and tweets about the brand and extra followers via micro blogging (Hoffman & Fodor,2010).

This is expected because the NBB can make some exclusive footage during their events and therefore it will be the official pictures of the event. One can say that the NBB tries to convince the fans to engage with the content, with two of the eight cues to convince consumers:

- **commitment:** the federation shows commitment with the fans because they give the fans some little extra information during their events.
- **argumentation:** the NBB tries to engage their fans by giving them good and relevant information about their events.

But, as stated earlier, for text messages counts that it will lead to a lower level of social brand awareness because people only remember 10% of what they hear and 20% of what they read, but about 80 percent of what they see and do (Lester, 1994-1996). Also is given that 83% of human learning occurs visually (U.S. Department of Labor, OSHA Office of

Training and Education, 1996). Therefore the text posts will only lead to brand awareness because it contains relevant information for the followers, but the followers will not pick up a high level of brand awareness because it is written. But according to Petty and Cacioppo the consumers will like text post when the involvement among the consumers is high, because of the central route of processing information. (Petty and Cacioppo, 1994).

So the with text posts the NBB can show commitment and offer good argumentation, but due to the central route of processing information and the low involvement, less fans pick up on this information.

3.6.4 Hypothesis 4: Posting unique fan-created (live) photo's via social media will lead to a higher level of social brand perception than the level of H1.

To see how this hypothesis is tested, the table of variables is stated in appendix 6 on page 77

3.6.4.1 Expected conclusions

The expectations before the start of this study were that due to the unique fan created photos, spreading the word about the brand (the highest level of brand perception) can be reached via social media. This means that the primary reactions on these photo posts will be shares on the social network of Facebook (Hoffman & Fodor,2010) and retweets via micro blogging (Hoffman & Fodor,2010).

This is one level of brand perception higher than for hypothesis 1 because for this hypothesis the same cues are used as for hypothesis one. But also one extra cue is being added:

- **social prove:** this content is created by other fans of the federation which results in the most honest content, which is therefore social proven.

This reason and the facts that user generated content about brands is more likely to increase brand perception among other followers because it is not marketing driven from the company and therefore it is perceived as more honest, personal and genuine content (Grace& O' Cass, 2005; Pan et al. 2007; Wenger 2008; Digital Visitor, 2012).

3.6.5 Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3

To see how this hypothesis is tested, the table of variables is stated in appendix 7 on page 78.

3.6.5.1 Expected conclusions

The expectations before the start of this study were that due to the unique fan created text , brand engagement (the middle level of brand perception) can be reached via social media. This means that the primary reactions on these photo posts will be likes on the social network of Facebook (Hoffman & Fodor,2010) and replies and extra followers via micro blogging (Hoffman & Fodor,2010).

This is one level of brand perception higher than for hypothesis 1 because for this hypothesis the same cues are used as for hypothesis one. But also one extra cue is being added:

- **social prove:** this content is created by other fans of the federation which results in the most honest content, which is therefore social proven.

This reason and the facts that user generated content about brands is more likely to increase brand perception among other followers because it is not marketing driven from the company and therefore it is perceived as more honest, personal and genuine content (Grace& O’Cass, 2005; Pan et al. 2007; Wenger 2008; Digital Visitor, 2012).

3.6.6 Hypothesis 6: Posting unique fan-created (live) video’s will lead to a higher level of brand perception than the level of H2.

To see how this hypothesis is tested, the table of variables is stated in appendix 8 on page 67.

3.6.6.1 Expected conclusions

The expectations before the start of this study were that due to the unique firm created videos the highest level of brand perception can be reached: spread the word. This means that the primary reactions on these photo posts will be shares on the social network of

Facebook (Hoffman & Fodor,2010) and retweets via micro blogging (Hoffman & Fodor,2010).

This is the same level of brand perception as for hypothesis 5 because for this hypothesis the same cues are used as for hypothesis five. It will lead to more spreading the word, but it cannot be stated as a higher level of brand perception, due to the lack in number of levels by the model of Hoffman & Fodor (2010).

In addition to hypothesis five one extra cue is being added:

- **social prove:** this content is created by other fans of the federation which results in the most honest content, which is therefore social proven.

This reason and the facts that user generated content about brands is more likely to increase brand perception among other followers because it is not marketing driven from the company and therefore it is perceived as more honest, personal and genuine content (Grace& O’Cass, 2005; Pan et al. 2007; Wenger 2008; Digital Visitor, 2012).

3.6.7 Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.

To see how this hypothesis is tested, the table of variables is stated in appendix 9 on page 80.

3.6.7.1 Expected conclusions

The expectations before the start of this study were that spreading the word on the social network and the micro blogging channel would lead to a higher number of fans who were going to participate on the social media channels.

One can say that when the brand perception is higher, the fans will participate more into a virtual community.

This was expected because of the facts that (stated earlier):

“When content marketing is used in a right way it results in company awareness and trust among its consumers, this awareness and trust will result in a more favorable attitude towards buying the brands products. The existence of brand awareness and trust is

important because it significantly decreases the will of the consumer to stop engaging with a brand (Morgan & Hunt, 1994)."

And fans will also join the virtual community because of the facts that:

"Fans like to belong into a community because, people want to be part of a larger social group (Figallo, 1998). Also psychology studies show that people have the need to be affiliated with others and belong to something (Watson&Johnson, 1972), also communities and groups provide individuals with information (Watson&Johnson, 1972)."

Besides that people want to have an own social identity and by becoming part of the community they can express themselves and connect themselves with the values, attitudes and the behavioral intentions from the imagined social groups, according to the social identity theory (Hogg, 1996; Tajfel, 1978; Turner, 1978, 1985).

3.6.8 Hypothesis 8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.

To see how this hypothesis is tested, the table of variables is stated in appendix 10 on page 81.

3.6.8.1 Expected conclusions

The expectations before the start of this study were that when the virtual community grows it will have a positive effect on the number of participants and spectators of the events held by the NBB. It will also increase the revenues out of these increasing numbers of spectators and participants.

This is because of the facts that (as stated earlier):

"It is proven that 60% of the followers on social media are more likely to purchase that specific brand (Van Bregt, 2012). This results in the eighth and final hypothesis".

and also:

"In order to build a good relationship it is important to create buying loyalty and attitude loyalty, besides brand awareness and trust, among the consumers (Um, 2008). This because buying loyalty can result in increasing market share and attitude loyalty can result in a higher price for the products (Um, 2008)."

4. Results

The results of these hypothesis will be stated in the paragraphs below. These results will be explained per hypothesis. These hypothesis will help to answer the central question of this research: *“How does content marketing via different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”* Besides this, there are some general results, which answers the question: what content to post to achieve certain goals.⁹

The results of this consist out of two parts. In the first part the results of the multiple regression analyses are presented. The second part contains the results of the hypothesis.

4.1 Testing the hypotheses by linear regression

The regression analyses are set up according to the three levels over brand perception and splitted on the two types of media.

Table 1: Anova outputs linear regression models awareness, engagement and spread the word

	R square	F	Sig.
Regression social network awareness	,375	4,516	0,000*
Regression micro blogging awareness	,270	11,526	0,000*
Regression social network engagement	,496	7,025	0,000*
Regression micro blogging engagement	,125	4,453	0,000*
Regression social network spread the word	,311	3,370	0,000*
Regression micro blogging spread the word	,065	2,165	0,002*
Regression virtual community - spectators/participants	,002	1,016	0,384

$N = 1450$; * $p < .05$

⁹ These results can be found in appendix 11: Managerial do's and don'ts on page 82

Table 1 shows that 6 out of 7 regressions are significant. The regressions of the levels of brand perception and the social media channels are all significant. This was also expected based on the theories above. The only regression which is not significant is the link between the number of fans in the virtual community and the numbers of participants and fans at the events of the NBB. This last link was expected to be significant as well but the results show that there is not a significant link.

Table 2: *Linear regression coefficients for awareness via the social network depending on the type of content*

	B	T	Sig.
Baseline	,905	,068	,946
News	10,096	1,341	,182
Fun	10,280	,870	,386
Information	9,149	1,382	,169
User input	-1,096	-,051	,959
Photo	25,321	6,172	,000*
Video	33,276	3,963	,000*
Published before	3,004	,453	,651
Published live	1,160	,151	,881
Published afterwards	2,947	,400	,690
Published by the firm	2,188	,299	,765
Basketball Days	9,695	-,826	,410
Dunker	-6,458	-,772	,441
Final Four	-5,096	-,314	,754
NBB Beker	-12,129	-1,707	,090
NJK	-5,096	-,314	,754
Rollers	2,011	,255	,799
Streetball	-11,467	-1,252	,213

Events with less Spectators	-1,138	-,121	,904
Poll	43,920	2,009	,046*

$N = 382$; * $p < .05$

The outcomes of the regression with awareness as the dependent variable and social network as the channel, showed that via the social network some types of content are significant. The significant types of content were all positively significant these are photo content (b= 25,321 and sig = ,000), video content (b=33,276 and sig = ,000) and also questions asked in polls (b= 43,920 and sig ,046).

Table 3: *Linear regression coefficients for awareness via micro blogging depending on the type of content*

	B	T	Sig.
Baseline	,139	,568	,570
News	-,144	-,617	,537
Fun	-,161	-,594	,553
Information	-,115	-,494	,621
User input	-,031	-,127	,899
Photos	-,261	-1,865	,063
Videos	-,097	-1,004	,316
Published before	,059	1,139	,255
Published live	,068	1,399	,162
Published afterwards	,284	4,905	,000*
Published by the firm	-,028	-,555	,579
Published by fans	,172	1,824	,069
Event	-,004	-,374	,708
Basketball Days	-,155	-,807	,420

Dunker	-,174	-2,088	,037*
NBA	-,257	-,856	,392
NBB Beker	-,031	-,867	,386
NJK	-,075	-,242	,809
Rollers	-,107	-1,294	,196
Streetball	,062	,628	,530
Vrouwen Eredivisie	-,196	-,839	,402
Events with less Spectators	-,020	-,144	,886

$N = 1068$; * $p < .05$

Based on the outcomes of the regression with awareness as the dependent variable and micro blogging as the channel can be said that via the social network some types of content are significant. The content type that is significantly positive are tweets published after the event took place ($b = ,284$ and sig $,000$). Even though these effects are positive there are some significant negative effects as well, tweets about “Dunker” are perceived as negative ($b = -,174$ and sig $,037$).

Table 4: Linear regression coefficients for engagement via the social network depending on the type of content

	B	T	Sig.
Baseline	16,028	1,584	,115
News	-4,291	-,753	,453
Fun	-3,936	-,440	,661
Information	-,518	-,103	,918
User input	-14,673	-,905	,367
Photo	7,614	2,451	,015*
Video Dummy	9,850	1,549	,123
Published before	-2,756	-,549	,584

Published live	3,758	,644	,521
Published afterwards	1,570	,281	,779
Published by the firm	1,400	,253	,801
Published by fans	-,366	-,022	,983
Basketball Days	-13,341	-1,502	,135
Dunker	-17,485	-2,762	,007*
Final Four	-14,673	-1,195	,234
NBB Beker	-15,027	-2,793	,006*
NJK	-14,673	-1,195	,234
Rollers	-10,931	-1,830	,069
Streetball	-11,389	-1,642	,103
Events with less Spectators	-15,467	-2,164	,032*
Poll	82,184	4,964	,000*

$N = 382$; * $p < .05$

To create engagement via the social network some content can be used based on the SPSS outcome. The content which is significantly positive is photo content ($b=7,614$ and sig ,015) and polls ($b=82,184$, sig ,000). It is better to not publish content about “Dunker” and about the NBB Beker on the social network while trying to gain engagement, because this content results in a decrease of the level of engagement.

Table 5: *Linear regression coefficients for engagement via micro blogging depending on the type of content*

	B	T	Sig.
Baseline	,150	,456	,649
News	,055	,176	,861
Fun	,114	,313	,754

Information	,130	,417	,677
User input	,272	,817	,414
Photo	-,159	-,846	,398
Video	-,063	-,480	,632
Published before	,251	3,628	,000*
Published live	-,002	-,026	,980
Published afterwards	,162	2,086	,037*
Published by the firm	,115	1,692	,091
Published by fans	,022	,175	,861
Event	-,037	-2,843	,005*
Basketball Days	-,511	-1,974	,049*
Dunker	-,409	-3,653	,000*
NBB Beker	-,024	-,490	,624
NJK	-,086	-,207	,836
Rollers	,033	,295	,768
Streetball	,103	,777	,437
Vrouwen Eredivisie	,078	,248	,804
NBA	-,144	-,355	,722
Events with less Spectators	-,294	-1,585	,114

$N = 1068$; * $p < .05$

Unlike creating engagement via the social media, creating engagement via micro blogging works out with the moment that the content is posted instead of the content itself. When content is posted before the event takes place ($b=,251$ and sig ,000) or after the event took place ($b=,162$ and sig ,037) it has an positively significant effect on engagement.

Contradicting to the positive effects, the negative effects do have links to the kind of content. Announcing an event ($b=-,037$ and sig ,005), tweeting about the Basketball Days ($b=-,511$ and sig ,049) and tweeting about Dunker ($b=-,409$ and sig ,000) has a negative effect on engaging with the fans.

Table 6: *Linear regression coefficients for spreading the word via the social network depending on the type of content*

	B	T	Sig.
Baseline	-,587	1,786	,076
News	,305	1,648	,102
Fun	,835	2,879	,005*
Information	,154	,949	,344
User input	,129	,245	,807
Photo	,009	,088	,930
Video	,574	2,783	,006*
Before	,152	,936	,351
Live	-,115	-,610	,543
Afterwards	,030	,166	,868
Firm	,306	1,704	,091
Basketball Days	-,024	-,085	,933
Dunker	,153	,745	,458
Final Four	,129	,323	,747
NBB Beker	,116	,662	,509
NJK	-,086	-,207	,836
Rollers	,347	1,783	,077
Streetball	,475	2,104	,037*
Events with less spectators	,075	,323	,747
Poll	-,070	-,129	,898

$N = 382$; * $p < .05$

The SPSS results show that if the goal is to let the fans spread the word about the content via the social network it is better to use funny content (b=,835 and sig ,005), video content (b=,574 and sig ,006) and also Streetball content (b=,475 and sig ,037). One other point that was proven by the SPSS results is that when the NBB want to let the fans speak about the social network content, they can't do anything wrong because none of the content is significantly negative.

Table 7: *Linear regression coefficients for spreading the word via micro blogging depending on the type of content*

	B	T	Sig.
Baseline	-,395	-,518	,605
News	,470	,648	,517
Fun	,414	,492	,623
Information	,271	,376	,707
User input	,323	,419	,676
Photo	,291	,667	,505
Video	,282	,934	,351
Before	,243	1,517	,130
Live	,110	,721	,471
Afterwards	,175	,973	,331
Firm	,401	2,560	,011*
Fan dummy	,070	,238	,812
Event	-,007	-,214	,831
Basketball Days	-,467	-,781	,435
Dunker	-,011	-,044	,965
NBB Beker	-,047	-,415	,678
NJK	,131	,135	,893
Rollers	,006	,025	,980

Streetball	,301	,983	,326
Vrouwen Eredivisie	-,555	-,761	,447
NBA	-,212	-,226	,821
Less Spectator	-,268	-,624	,533

$N = 1068$; * $p < .05$

If the goal is to get the fans spreading the word about the content of the NBB, SPSS data shows that the only thing they have to do is create the content themselves. Firm made content has a positive result ($b = ,401$ and $sig = ,011$) while creating spreading the word via micro blogging. Also just like using the social network for spreading the word the company there is not any type of content which has an negative influence on spreading the word via micro blogging.

Table 8: Linear regression coefficients for the effect of the size of a virtual community on the numbers of spectators and participants of the NBB events

	B	T	Sig.
Baseline	,591	42,764	,000*
Awareness	-,006	-6,303	,000*
Engagement	,005	,002	,003*
Spreading the word	-,006	-,487	,627

$N = 1450$; * $p < .05$

The theory described above showed that a virtual community which is increasing in size will lead to more spectators and participants of events. But the data of this research showed that (in this case) the theory is neglected. Although the regression shows significant results for the baseline, the awareness and the engagement the data does not show a link between the increasing (online) community and the number of fans.

4.2 Hypothesis 1: Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception

Firm created photos		
Number of (firm created) photos posted	94	
Number of photos on a social network	91	97%
Number of photos via micro blogging	3	3%
Number of people who showed awareness to these photos on the social network	4499	49,43 times per photo
Number of people who showed awareness to these photos via micro blogging	0	0 times per photo
Number of people who showed engagement to these photos on the social network	861	9,46 times per photo
Number of people who showed engagement to these photos via micro blogging	0	0 times per photo
Number of people who spread the word because of these photos on the social network	42	0,46 times per photo
Number of people who spread the word because of these photos via micro blogging	4	1,33 times per photo

During the period November 2011 until May 2012 105 photos were posted on the social media channels. Out of these 105 photos, 94 were firm made, by the NBB.

These 94 photos resulted in the following results:

Based on these numbers can be said that unique firm-created (live) photos led to awareness on the social network and to spreading the word via micro blogging.

Because for the social network 4499 is bigger than 861 and then 42.

Therefore the photos primarily reached awareness.

For micro blogging counts that the firm made photos only reached spreading the word, because 4 is

bigger than 0.

But the SPSS data in this study showed that photo content is positively significant when trying to reach awareness ($B = 25,321$ and $\text{sig.} = 0,000$) and engagement ($b = 7,614$ and $\text{sig.} = 0,015$) via the social network, but not via micro blogging. One can say that both the in actives and the actives will be attracted by (firm created) photo content via the social network. The photo content via social networks led to 4% extra awareness and to 1.5% extra engagement. While the firm created content had a positive effect ($b = 0,401$ and $\text{sig.} = 0,011$) on for reaching spread the word via micro blogging. This firm created content led to 0,038% extra spreading

the word via micro blogging. Based on the numbers stated above, one can say that for the fans and followers of the NBB (in the period November 2011 - May 2012) hypothesis 1:

“Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception” can partly be accepted.

4.3 Hypothesis 2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.

Firm created videos		
Number of videos posted	25	
Number of videos on a social network	15	60 %
Number of videos via micro blogging	10	40 %
Number of people who showed awareness to these videos on the social network	399	26,6 times per video
Number of people who showed awareness to these videos via micro blogging	0	0 times per video
Number of people who showed engagement to these videos on the social network	168	11,2 times per video
Number of people who showed engagement to these videos via micro blogging	2	0,2 times per video
Number of people who spread the word because of these videos on the social network	10	0,67 times per video
Number of people who spread the word because of these videos via micro blogging	7	0,7 times per video

Based on these numbers can be said that unique firm-created (live) videos led to awareness on the social network and to spreading the word via micro blogging. Because for the social network: 399 is more than 168 and then 10. Therefore the videos primarily reached awareness.

For micro blogging counts that the firm made videos reached spreading the word, because 7 is bigger than 2. But the SPSS data in this study showed that video content (B= 33,276 and sig. 0, 00) is positively significant for reaching awareness and for spreading the word (B= 0,574 and sig. 0,006) (not for engagement) via the social network, but not via micro

blogging.

Therefore, it can be said that the in actives gain awareness via the social network, but not via micro blogging and the actives spread the word via the social network due to firm created videos. Based on the numbers stated above, one can say that for the fans and followers of

the NBB (in the period November 2011 - May 2012) Hypothesis 2: **“Posting unique firm-created (live) videos will lead to a high level of social brand perception”** can be rejected, because there is no significant link between the firm created video content and engaging with the brand via social networks and via micro blogging.

4.4 Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.

Firm created texts		
Number of texts posted	803	
Number of texts on a social network	231	28,8 %
Number of texts via micro blogging	572	71,2%
Number of people who showed awareness to these texts on the social network	1440	6,23 times per text
Number of people who showed awareness to these texts via micro blogging	14	0,02 times per text
Number of people who showed engagement to these texts on the social network	401	1,74 times per text
Number of people who showed engagement to these texts via micro blogging	72	0,13 times per text
Number of people who spread the word because of these texts on the social network	31	0,13 times per text
Number of people who spread the word because of these texts via micro blogging	310	0,54 times per text

During the period November 2011 until May 2012 1291 text messages were posted on the social media channels. Out of these 1291, 803 were firm made, by the NBB. These 803 texts resulted in the following results:

Based on these numbers can be said that unique firm-created (live) texts led to awareness on the social network and to spreading the word via micro blogging.

Because for the social network: 1440 is more than 401 and then 31. Therefore the texts primarily reached awareness.

For micro blogging counts that the firm made texts reached spreading

the word, because 310 is bigger than 72 and 14.

But the SPSS data in this study showed that text content is not significant at all. The only positive fact was that the text posts always had a positive impact, but these impacts weren't significant.

Therefore, it can be said that the in actives and the actives do not form a brand perception due to firm created texts.

Based on the numbers stated above, one can say that for the fans and followers of the NBB (in the period November 2011 - May 2012) Hypothesis 3: **“Posting unique firm-created (live) texts will lead to a low level of social brand perception”** can be rejected, because there is not a significant link between the text content and brand perception at all, therefore can be said that text content does not lead to a brand perception among fans and followers of the NBB.

4.5 Hypothesis 4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.

Firm created photos		
Number of photos posted	11	
Number of photos on a social network	7	63,6%
Number of photos via micro blogging	4	36,4%
Number of people who showed awareness to these photos on the social network	270	38,6 times per photo
Number of people who showed awareness to these photos via micro blogging	0	0 times per photo
Number of people who showed engagement to these photos on the social network	150	21,4 times per photo
Number of people who showed engagement to these photos via micro blogging	0	0 times per photo
Number of people who spread the word because of these photos on the social network	15	2,14 times per photo
Number of people who spread the word because of these photos via micro blogging	0	0 times per photo

During the period November 2011 until May 2012 105 photos were posted on the social media channels. Out of these 105 photos, 11 were fan made or made by other sites, not by the NBB.

Based on these numbers one can say that unique fan-created (live) photos led to awareness on the social network and to nothing via micro blogging.

Because for the social network: 270 is more than 150. Therefore the photos primarily reached awareness.

For micro blogging counted that the firm made photos only reached “spreading the word”, because 4

was bigger than 0.

The SPSS data in this study showed that photo content is positively significant when trying to reach awareness ($B = 25,321$ and $\text{sig.} = 0,000$) and engagement ($b = 7,614$ and $\text{sig.} = 0,015$) via the social network, but not via micro blogging. One can say that both the in actives and the actives will be attracted by (firm created) photo content via the social network. The photo content via social networks led to 4% extra awareness and to 1.5% extra engagement. While the fan created content never was significant. Based on the numbers stated above, one can say that for the fans and followers of the NBB (in the period November 2011 - May 2012) hypothesis 4: **“Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.”** can be rejected, although the number of people who engage with the fan created photo content is almost twice the number of the number of people who engaged with the firm made photos (8,68 times against 13,6 times).

4.5 Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3

During the period November 2011 until May 2012 1291 text messages were posted on the social media channels. Out of these 1291, 488 were fan made, not by the NBB.

Fan created texts		
Number of texts posted	488	
Number of texts on a social network	16	3,3 %
Number of texts via micro blogging	472	96,7%
Number of people who showed awareness to these texts on the social network	130	8,1 times per text
Number of people who showed awareness to these texts via micro blogging	148	0,31 times per text
Number of people who showed engagement to these texts on the social network	31	1,9 times per text
Number of people who showed engagement to these texts via micro blogging	114	0,24 times per text

Number of people who spread the word because of these texts on the social network	4	0,25 times per text
Number of people who spread the word because of these texts via micro blogging	38	0,08 times per text

Based on these numbers can be said that unique firm-created (live) texts led to awareness on the social network and to spreading the word via micro blogging.

Because for the social network: 1440 is more than 401 and then 31. Therefore the texts primarily reached awareness.

For micro blogging counts that the firm made texts reached spreading the word, because 310 is bigger than 72 and 14.

But the SPSS data in this study showed that text content is not significant at all. The only positive fact was that the text posts always had a positive impact, but these impacts weren't significant.

Therefore, it can be said that the in actives and the actives don't form a brand perception due to fan created texts.

Based on the numbers stated above, one can say that for the fans and followers of the NBB (in the period November 2011 - May 2012) Hypothesis 4 : **“Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3”** can be rejected, because there is not a significant link between the text content and brand perception at all, therefore, it can be said that text content does not lead to a brand perception among fans and followers of the NBB.

4.6 Hypothesis 6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H2.

Fan created videos		
Number of videos posted	17	
Number of videos on a social network	10	58,8 %
Number of videos via micro blogging	7	41,2%
Number of people who showed awareness to these videos on the social	304	8,1 times per video

network		
Number of people who showed awareness to these videos via micro blogging	0	0 times per video
Number of people who showed engagement to these videos on the social network	55	1,9 times per video
Number of people who showed engagement to these videos via micro blogging	0	0 times per video
Number of people who spread the word because of these videos on the social network	4	0,25 times per video
Number of people who spread the word because of these videos via micro blogging	0	0 times per video

Based on these numbers can be said that unique fan-created (live) videos led to awareness on the social network and to nothing via micro blogging.

Because for the social network: 304 is more than 55 and then 4.

Therefore, the videos primarily reached awareness. For micro blogging counted that the fan made video reached nothing.

But the SPSS data in this study showed that video content (B=

33,276 and sig. 0, 00) is positively significant for reaching awareness and for spreading the word (B= 0,574 and sig. 0,006) (not for engagement) via the social network, but not via micro blogging. Therefore can be said that the in actives gain awareness via the social network, but not via micro blogging and the actives spread the word via the social network due to fan created videos. Based on the numbers stated above, one can say that for the fans and followers of the NBB (in the period November 2011 - May 2012) Hypothesis 6: **“Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H5”** can be rejected. There only is significant link between the firm created video content and spreading the word about the brand via social networks (not via micro blogging), therefore can be said that video content does lead to a high level of social brand perception via the social network but not via micro blogging. But this level is not higher than the level of H5, because of the limitations by the Social Media Return on Investment model by Hoffman & Fodor (2010). Because “spreading the word is the highest level, according to the model.

4.7 Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase of the number of fans in the virtual community.

In the periods in which the content was not researched the NBB had 679 followers on Twitter and 396 Fans on Facebook. These fans were exposed to the following content, which mainly contained texts:

Content overview 1 November - 31 January (before the preliminary results were implemented)	
Type of content	Number of posts
Firm created texts	114
Fan created texts	0
Firm created photos	7
Fan created photos	0
Firm created videos	0
Fan created videos	1

Due to this content, the followers reacted “naturally” on the content in the following way. These reactions show that there were more in active fans than active fans on the pages (the numbers are in number of persons).

Content overview 1 November - 31 January (before the preliminary results were implemented)			
Type of content	Awareness per post	Engagement per post	Spread the word per post
Firm created texts	3,68	0,46	0,10
Fan created texts	0	0	0
Firm created photos	37,14	3,29	0
Fan created photos	0	0	0
Firm created videos	0	0	0
Fan created videos	11	2	0

Due to this content the NBB reached 800 followers on Twitter (+18 % compared to three months earlier) and 400 Fans on Facebook (+ 1 % compared to three months earlier) by the 1st of February. Starting from this date, a laboratorial setting was created by testing some different types of content. This content varied from texts and videos till photos and polls. The content is described below:

Content overview 1 February - 6 may	
Type of content	Number of posts
Firm created texts	324
Fan created texts	380
Firm created photos	85
Fan created photos	10
Firm created videos	21
Fan created videos	16
Firm created polls	10

This change in content resulted into the following levels of brand perceptions among the fans (the numbers are in number of persons):

Content overview 1 February- 6 May			
Type of content	Awareness per post	Engagement per post	Spread the word per post
Firm created texts	3,19	1,15	0,55
Fan created texts	0,73	0,37	0,06
Firm created photos	50,46	9,98	0,5
Fan created photos	27	15	1,5
Firm created videos	19	8,1	0,71
Fan created videos	18,3	3,3	0,25
Firm created polls	33,5	53,9	0

The switch in content resulted in different reactions among the fans, but for nearly all types of reactions, the number of people who had a perception about the brand due to the content grew.

Only the firm created texts reached a little less awareness compared to the period before February. Except for this result, more people showed awareness and engagement due to the content, also the number of people who spread the word about the brand grew. This increase in brand perception led to the following numbers of followers and fans on the

channels, with 1315 followers on Twitter (+ 64, 4 % compared to three months earlier) and 866 Fans on Facebook (+ 116, 4 % compared to three months earlier).

Therefore, it can be said that the involvement among the fans was (much) higher in the period from February till May, although the period from November till January lasted almost one month longer. This higher involvement also resulted in more awareness (among the inactives) and more engagement and more fans spreading the word so one can say that the highest level of social brand perception was reached.

This high level of social brand perception resulted in an increasing number of extra fans in the virtual community. In the period from November till February the Facebook gained 1% extra fans, while the Twitter community grew with 18%. These increases were due to the “usual” content. After that the NBB decided to implement the preliminary results of this study. This resulted in the following numbers:

The Facebook community increased by 116, 4% in two months, while the Twitter account also increased by more than 64%. So based on these facts hypothesis 7: **“High level of social brand perception via social media among the fans will lead to an increase of number of fans in the virtual community”** can be accepted.

4.8 Hypothesis 8: An increase in the number of fans in the virtual community will lead to an increase of number of spectators and participants of the events.

Based on the SPSS results can be said that the reactions on the posts in the virtual community will not lead to an increase in number of spectators and participants during the events because the linear regression cannot be used to test the links between the virtual community and the number of spectators and participants of the events.

Although the links in the model are positive and significant ($B= 0,591$ and sig. 0,000). This can be described because of the positive and significant engagement ($B=0,005$ and sig 0,003), but this was lowered because of the significant and awareness ($B=-0,006$ and sig 0,000).

Based on the SPSS statistics, the reactions on the posts lead to a higher level of social brand perception among the fans and this resulted in a higher number of virtual fans.

There cannot be said that the higher number of virtual fans led to an increase in number of spectators and participants because the linear regression itself is not significant (sig is 0,384)

Based on the facts above can be said that hypothesis 8: **An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events**, can be rejected.

5. Discussion

The results of this study provides relevant content choices for the NBB to use in their social network and on their micro blogging communities. These results can be used to manage the content which will be used to inform their fans. This study provides tactics to reach certain goals (creating awareness and engagement and letting the fans spread the word) via certain channels (social networks and micro blogging) owned by the NBB. These results did not match the existing theory in five out of the eight hypotheses.

This was because of the fact that the studies which were the fundament for this study were sometimes a bit outdated and also describing other (more general) forms of media and content studies. Also during this study the lack of available theory was experienced because of the novelty of the subject of content marketing used in social media.

Besides this, the outcomes of the study were also influenced by the fact that the study contained a very specific and tiny target audience (Dutch basketball fans) instead of a very broad and numerous audience. This results in the fact that the results of this study cannot be projected on another target audience, they can probably only be used for basketball companies in Holland to reach their followers via a social network or via micro blogging. But this offers the NBB the opportunity to be one of the first sports federations who can implement tactics which match the social needs of their fans.

They can create a very active and intensive community of Dutch basketball fans to attract more spectators to their games and to gain more participants for their events. They can also shape this study even a bit further to create a model which makes it possible to attract new members of the federation. But when they want to do this they have to keep monitoring because the audience grows and changes real-time.

6. Conclusion

This paragraph answers the central question of this research: *“How does content marketing via different types of content on social media affect the level of brand perception of their fans and how to get more participants and spectators out of that?”*

Content marketing affects the level of brand perception in a way, that the fans have different reactions on different types of content.

For example, when the goal is to make the fans aware of an event, the NBB should use polls, photos and videos via a social network, but they do have to Tweet afterwards to gain awareness. Besides that, when the NBB wants to reach engagement they also have to state polls and post photo content on social networks, but they do not need to post videos. They also have to Tweet before the event takes place. But when the federation wants to create ambassadors of the NBB (people who spread the word) they have to create the micro blogging content themselves or they have to post funny things or Streetball items via social networks. Based on these outcomes can be said that the “inactives” can be reached best by polls, videos and photos and tweets afterwards. To involve the actives in their virtual communities they have to place photos, videos, polls and they have to tweet about the events.

Posting these types of content via these media channels (especially creating engagement), helped the NBB grow their virtual communities.

Growing their communities the NBB did not have a direct positive link with attracting more participants and spectators out of that. So one can say that the NBB cannot directly attract more participants and spectators by posting the content mentioned above. Although they mainly have to focus on creating engagement among the fans. Because engagement will indirectly lead to the “biggest” increase in participants and spectators.

The use of content marketing via different types of channels led the NBB from 1200 fans in their community (social network and micro blogging combined) on February 1st 2012 to a community with 2181 fans on the 6th of May 2012. So implementing content marketing led to a virtual community doubled in size in about two months and they gained more spectators and participants out of that.

7. Implications

7.1 Theoretical implications

While there are many studies about when to post a message via social media, on which media do you have to share messages or how to act on social media, this research answers the topic “what” to share via social media as a company. Especially what kind of content (photos, videos and texts) to post on social media to reach certain goals. It also combines the topic of which content to post on which channel to reach a special goal. Besides that it gives an insight about how to use content marketing in social media. This study extends the literature about both social media usage and content marketing, besides that it links those two topics into one study.

Besides that this research combines content marketing and social media, it also is a very segmented study. The results can only be (directly) implicated for federations just like the NBB. For example it makes sense to use this study as a source of research for a new social media strategy by the KBB (Belgian Basketball Federation) or by the KNVB (Dutch Football Federation). In contradiction to that it will not make any sense to use these results for other companies who leverage experiences but to a whole other kind of fans, like music festivals or artists. This can be one point of research for the future, does this data match the reactions via social media of other sports federations or from the consumers of other companies or artists with fans.

As mentioned above social media and content marketing has not been linked in the past. Therefore there could be further research on the facts how content management can influence the brand perception via social media.

It may be useful to compare this study with other studies based on the same topic. Because social media (content) and especially the link between brand perception and social media (content) is a relatively new academic topic it may be useful to see how this subject academically evolves during the next couple of years. Maybe this study (and further studies) can extend the theories mentioned in this study about (virtual) communities (Dennis, Poothari, & Natarajan, 1998; Kilsheimer, 1997; Figallo, 1998; Hiltz & Wellman, 1997; Rheingold, 1993; Hiltz&Wellman, 1997; Hiltz, 1984) based on the facts that this study contains a special form of a (virtual) community.

This study can also be an insight for other sports federations (in the Netherlands), because many sports federations are struggling with implementing social media to reach their fans. These federations see the opportunities of social media, but they do not know how to handle it, this study can maybe provide a useful insight for these federations and they can maybe do a similar research in their own sport.

This study also does not match the existing theories of fan generated content. Although this content may be perceived as more honest, personal and genuine content (Grace & O' Cass, 2005; Pan et al. 2007; Wenger 2008; Digital Visitor, 2012) and would therefore lead to more positive reactions among the consumers. This did not lead to a significantly better perception among the fans of the NBB. These fans reacted almost the same on the company content as on the fan generated content. Even more when the NBB tries to let the fans spread the word on micro blogging, the firm generated content had a positive influence on that goal and the fan generated content did not.

Next to the fan content which did not directly work led to more positive reactions, the increasing community did not lead to a direct significant increase in number of participants and spectators of the events. Therefore can be said that for this research did not matches the theories of Um (2008), Van Bregt (2012) and Senecal and Nantal (2004). This could be because this study was very much shaped to the specific data of the NBB and basketball fans in the Netherlands.

For the extensions of this study can be researched of the results found in this study are part of a trend in combining sports fans and social media, or if it is just a particular case. It may also be nice if the framework of this study could be tested for other (very different kinds of) brands. Because these results can be a part of a new way of reacting on social media content.

7.2 Managerial implications

Based on the research done in this study there can be three goals (creating awareness, creating engagement and letting the fans spread the word about you), which can be reached via two channels (the social network and via micro blogging). The insights, given below, are based on 1450 social media posts from the period November 2011 until May 2012 and posted on the channels of the NBB.

- Create awareness via Social Networks

To create awareness among their fans via social networks, the NBB has to ask their opinion in polls (which leads to 7% extra awareness), post video content of their events (+5,3%) and post photos of their events (+4%).

- Create engagement via Social Networks

To create engagement among their fans via social networks, the NBB has to again ask questions in polls (+13%) and post photos (+1,5%) again as well. This only counts for events with an even number or more spectators than usual, because if a lower number of spectators is expected it will lower the engagement grade by 2,5%.

- Let the fans spread the word via Social Networks

If the NBB wants to have ambassadors who spread the word about the Federation, they have to post funny things (+0,13%) and they also have to cover the Streetball action (+0,075%)

- Create awareness via Micro blogging

Unlike the social network, creating awareness via micro blogging is not about asking fans or posting visual content. It is all about tweeting afterwards about an event that has taken place (+0,027%), this counts for almost all the events except for the Dunker events (-0,016%).

- Create engagement via Micro blogging

Creating engagement via Micro blogging is all about timing, tweeting before results in 0,024% extra engagement, while tweets afterwards lead to +0,015% awareness. There are

two events which decrease the level of engagement when there is tweeted about: the Dunker events (-0,04%) and the Basketball Days (-0,05%).

- Let the fans spread the word via Micro blogging

When the NBB wants to get fans who spread the word via micro blogging, they only have to make the tweets themselves and they have to create the input and the content, this will lead to 0,038% extra spreading the word.

Do's					
Social Network					
Awareness		Engagement		Spread the word	
- Polls	+7%	Polls	+13%	Fun posts	+0,13%
- Video posts	+5,3%	Photos	+1,5%	Streetball posts	+0,075%
- Photo posts	+4%				
Micro blogging					
Awareness		Engagement		Spread the word	
Tweets afterwards	+0,027%	Tweets before	+0,024%	Firm tweets	+0,038%
		Tweets afterwards	+0,015%		
Don'ts					
Social Network					
Awareness		Engagement		Spread the word	
None		Events with less spectator posts	-2,5%	None	
Micro blogging					
Awareness		Engagement		Spread the word	
Dunker tweets	-0,016%	Dunker tweets	-0,04%	None	
		Basketball Days tweets	-0,05%		

This study also provides the Dutch Basketball Federation insights in the social “needs” of their fans to do research on the needs of (other) new media among these fans, because this study focused only on the social network: Facebook and the micro blogging channel: Twitter. This new media research can also provide key insights for the usage of “second screens” for Dutch basketball fans during their games and events. Maybe the NBB should focus on other new media platforms as well to engage the fans with their events.

This study could also be redone over time to see the differences, but there could also be more research among the post about the timing of the post (day in the week or time of the day).

8. Limitations

8.1 Theoretical limitations

Because social media (content) and especially the link between brand perception and social media (content) is a relatively new academic topic there was not much relevant theory about the subject and therefore this study had to be linked to more outdated theories, which were written in the era of mass media, so before the existence of social media or new media. Also the theory on social brand perception (Social Media ROI by Hoffman & Fodor, 2010) only focused on three levels of perception with some useful starters metrics, while they maybe could extended this model with some more and extra metrics. These metrics could also come from numbers in the Facebook statistics or from Twitter statistic programs such as HootSuite. These extra metrics could provide some more insights of defining the “levels” into more precise and “smaller” levels to define the social brand perception even better.

8.2 Managerial limitations

This study is done in the period from February until May 2012, in that period the NBB had 629 Facebook fans on average and also 1046 Twitter followers on average. But by the time this study will be published the NBB will have more than 1100 Facebook fans and more than 1500 Twitter followers and because these people can be triggered via other types of content, it may be useful for the NBB to keep monitoring on the level of brand perception among the fans.

The fans and followers should also be segmented to try to reach different target groups via different types of content, for example a Street ball fan is a totally different person as a fan of woman's basketball and probably totally different from a roller. So they will probably have different needs.

Besides that it may be useful for the future to count the numbers of spectators to get precise overviews, so that significant decisions can be made regarding how to attract more spectators to the events.

Another point that is worth the research is when the fans want to consume their information, at what time of the day, how long before or after the event.

What also may be nice to research for the NBB is how to build a (significant) positive relation between the content that is posted and the number of members of the NBB. So basically that the federation can split out what they do have to post to gain new (not virtual) members, what to post to gain more spectators, what to post to gain more participants during the events.

It is not only important to gain new members, spectators or participants, it is maybe more important to maintain the current fans into the created basketball community.

Another limitation can be that this study only focused on the two existing social media channels of the NBB, but "new media" is a coming trend, so there may be one or more "new" media which can be more suitable for the Dutch Basketball Federation.

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Appendixes

Appendix 1: Social Media Ranking by Rankingz June 22 2012

1-26

Rank	Organization	Twitter	Facebook	Avg. Buzz
50	 KNVB - Voetbal	27,372	43,653	6,252
56	 NBB - Basketball	1,400	1,040	1,110
51	 NOC*NSF	13,091	358	57
53	 KNLTB - Tennis	3,055	490	1,774
53	 Atletiekunie	3,848	913	339
54	 Sportvisserij Nederland	2,030	0	7
45	 KNHB - Hockey	6,505	8,881	1,371
45	 KNHS - Paardensport	7,246	6,521	1,140
48	 NeVoBo - volleybalbond	3,671	2,477	534
39	 WSB - watersportverbond	18,206	515	1,511
48	 Nederlandse IJshockey Bond	975	1,466	27
46	 KNWU - Wielrenunie	3,589	22	625
46	 NTFU - Toerfietsen	2,062	320	27
43	 KNKV - Korfbal	3,103	608	259
43	 NKBV - Klim en Berg	2,098	925	303
42	 NGF - Golf	1,474	0	1,549
42	 KNMV - Motorsport	2,418	1,223	18
42	 KNZB - Zwembond	3,038	485	15
42	 JBN - Judobond	1,988	24	242
42	 NHV - Handbal	2,036	0	210
41	 NOB - Onderwatersport	981	395	6
39	 BN - Badminton	536	0	485
38	 NKB - Kano	5,746	0	255
39	 NTTB - Tafeltennis	1,098	0	932
38	 KNBLO - Wandelen	1,541	0	914
39	 KNKB - Kaatsen	927	0	147
37	 KNCB - Cricket	2,508	753	75

27-54

 NSV - Wintersport	37	1,531	1,376	201
 NBF - Bowling	38	367	0	178
 KNR - Roeien	37	382	740	131
 Nederland Lacrosse	37	458	634	8
 NTB - Nederlandse Triathlon Bond	36	454	1,756	84
 NDB - Darten	36	1,156	0	121
 KNSB - Schaatsbond	35	2,669	178	158
 NHB - Handboogsport	33	334	671	37
 KNSB - Schaakbond	32	319	111	202
 SBN - Squash	28	551	0	97
 KNAS - Schermen	27	139	0	190
 NBB - Boksen	13	172	0	211
 KDBN - Karate	1	51	0	1,174
 NRA - Racquetball	1	0	0	2,630
 KNGU - Turnen	1	564	55	768
 KNKFF - Krachtsport	1	0	0	990
 KNS - Schaken	1	0	0	160
 NBB - Bridge	1	0	6	156
 FBN - Frisbee	1	0	0	101
 NCB - Curling	1	0	0	66
 AFBN - American Football	1	88	0	13
 KND - Dammen	1	0	0	50
 KNAF - Autosport	1	0	0	49
 FNMG - Midgetgolf	1	0	0	12
 KNBB - Biljart	1	0	0	8
 KNSA - Schieten	1	0	0	7
 NJBB - Jeux de Boules	1	0	0	0

Appendix 2: Social Media Ranking by Rankingz February 1st 2012

Sportbonden (#sportbonden) Last update: 11-01-2012 06:00 Comments		Not in the list?		
Rank	Last week	Twitter	Facebook	Avg. Buzz
1	1	43	13,296	35,217 933
2	4	49	1,956	83 421
3	2	43	4,770	6,673 287
4	3	38	12,070	391 497
5	5	40	4,475	5,443 410
6	8	44	797	2 423
7	7	43	2,163	457 302
8	6	43	2,853	202 149
9	10	41	2,520	260 417
10	9	41	2,728	15 303
11	13	41	1,256	967 430
12	11	41	2,387	294 27
13	12	41	1,704	482 15
14	16	38	1,074	0 385
15	15	38	1,374	12 195
16	14	39	1,222	131 10
17	25	38	1,604	534 74
18	23	34	2,135	126 574
19	32	35	1,414	2,644 98
20	20	35	1,785	513 206
21	26	35	768	0 390
22	18	36	908	0 76
23	*	36	1,304	0 0
24	19	32	834	6,349 0
25	24	33	222	0 535
26	*	33	257	1,607 49
27	21	29	4,391	0 120
28	22	30	448	0 168
29	*	28	284	444 0
30	38	27	133	0 209
31	*	27	190	457 0
32	27	25	243	0 268
33	28	22	667	0 9
34	29	17	92	0 167
35	31	1	31	27 3,519
36	35	1	0	0 424
37	37	1	0	0 308
38	33	1	248	55 222
39	17	1	0	4 192
40	47	1	0	0 156
41	43	1	0	0 79
42	48	1	0	0 63

Appendix 3: Hypothesis 1: Posting unique firm-created (live) photos via social media will lead to a high level of social brand perception

H1: Posting unique firm-created (live) photo's via social media will lead to a high level of social brand perception		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 4: Hypothesis 2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.

H2: Posting unique firm-created (live) videos will lead to a mediocre level of social brand perception.		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 5: Hypothesis 3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.

H3: Posting unique firm-created (live) texts will lead to a low level of social brand perception.		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 6: Hypothesis 4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.

H4: Posting unique fan-created (live) photos via social media will lead to a higher level of social brand perception than the level of H1.		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 7: Hypothesis 5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3

H5: Posting unique fan - created (live) texts will lead to a higher level of social brand perception than H3		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 8: Hypothesis 6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H2.

H6: Posting unique fan-created (live) videos will lead to a higher level of brand perception than the level of H5.		
Type of variable	Topic	
Dependent variable	Level of social brand awareness	Brand awareness Brand engagement Word of mouth
Independent variables	Type of post	Event News Fun User input
	Type of content	Poll Text Photo Video
	Time of publication	No time restriction Before Live Afterwards
	Source of the content	Firm made Fan made Other site made
	Type of event	No event BasketballDays Dunkers Kids Club Dutch Basketball League Final Four "Oranje Fever" male "Oranje Fever" female NBB Beker NBB Camps Nationale Jeugd Kampioenschappen Nationale Jeugd Teams Rollers Streetball Vrouwen Eredivisie FIBA World Cup Woman U17 NBA
Moderating variables	Type of Media	Micro blogging (Twitter) Social Networks (Facebook)
Control variables	Type of users	Inactives Actives

Appendix 9: Hypothesis 7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.

H7: High level of social brand perception via social media among the fans will lead to an increase the numbers of fans in the virtual community.		
Type of variable	Topic	
Dependent variable	Grade of participation	Participating in the Social Network
		Participating on the Micro blogging site
Independent variable	Level of social brand awareness	Brand awareness
		Brand engagement
		Word of mouth

Appendix 10: Hypothesis 8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.

H8: An increase in numbers of fans in the virtual community will lead to an increase the numbers of spectators and participants of the events.		
Type of variable	Topic	
Dependent variable	Type of interaction	Participating in events as participant
		Participating in events as a spectator
Independent variable	Grade of participation	Participating in the Social Network
		Participating on the Micro blogging site

Appendix 11: Managerial Do's and Don'ts

- Create awareness via Social Networks

Do's:

- Polls (b=43,920 and sig is 0,046) (+7% extra)
- Video posts (b=33,276 and sig is 0,000) (+5,3% extra)
- Photo posts (b= 25,3 and sig is 0,000) (+4% extra)

Don'ts

None

- Create engagement via Social Networks

Do's:

- Polls (b=82,184 and sig is 0,00) (+13% extra)
- Photos (b=7,614 and sig is 0,015) (1,2% extra)

Don'ts:

- Events with less spectator posts (b=-15,467 and sig is 0,032) (2,5% less)
- NBB Beker posts (b= -15,027 and sig is 0,006) (2,3% less)

- Let the fans spread the word via Social Networks

Do's

Fun posts (b=0,835 and sig 0,005) (0,13% extra)

Streetball posts (b=0,475 and sig is 0,037) (0,075% extra)

Video posts (B= 0,574 and sig. 0,006) (+0,09% extra)

Don'ts

None

- Create awareness via Micro blogging

Do's

Tweets afterwards (b=0,284, sig 0,000) (0,027% extra)

Don'ts

Dunker tweets (b=-0,174 and sig 0,037) (-0,016% less)

- Create engagement via Micro blogging

Do's

Tweets before (b=0,251 and sig 0,000) (0,028% extra)

Tweets afterwards (b=0,162 and sig 0,037) (0,015% extra)

Don'ts

Dunker tweets (b=-0,409 and sig 0,000) (-0,04% less)

Basketball Days tweets (b=-0,511 and sig 0,049) (-0,05% less)

Announce events tweets (b=-0.037 and sig 0,005) (-0,03% less)

- Let the fans spread the word via Micro blogging

Do's

Firm created tweets (b= 0,401 and sig 0,011) (+0,038%)

Don'ts

None