

# Content and feedback analysis of YouTube videos: Football clubs and fans as brand communities

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## **Abstract**

The use of Web 2.0 tools has been transforming the interaction between companies and their clients, especially for those that are selling emotional products. Consumers are generating and sharing contents concerning their favorite products on the web. Even if this process has been widely acknowledged, only a few studies have been specifically devoted to the analysis of both the contents and the feedback the consumers receive from other users.

This paper analyzes the online presence of sport brands through contents that are generated by sport clubs (official contents) and their fans (User Generated Content, UGC) on YouTube. After a description and classification of video contents, it examines the factors that influence the performance of the videos in terms of passive (videos views) and active behavior (any kinds of interaction with videos) among the viewers.

In order to carry out this analysis, 125 YouTube channels were considered thereby accounting for a total of 375 videos.

Results show that official contents are those preferred by the users/consumers and that if the video displays a passive/purely informative content, the chance of getting an active behavior from the users tends to decrease.

These findings may help companies manage their online presence, creating awareness about contents and information that should be spread and shared on the Web.

**Keywords:** Social media, Internet marketing, Web 2.0, Communication, YouTube

## **Introduction**

The use of Web 2.0 tools has been significantly transforming the interaction between companies and their clients, especially in the corporate communication of certain sectors where brands are seen as 'love brands' (Albert, Merunka, & Valette-Florence 2008) and products are mainly emotional such as in sport where fans are particularly close to their favorite team and therefore do intervene in the management of the club itself.

Online users have been extending the time they spend on the net thereby also deeply changing their role. They are no longer passive actors and they are contributing to the generation of much online content (User Generated Content, UGC) (Bernoff & Li, 2008) in some of the most popular Web 2.0 websites such as Wikipedia, YouTube, Pinterest, Flickr etc. According to Nielsen data (2012), the constant growth of their traffic confirms that such contents are valued and being used.

Considering that some Internet spaces are promoted directly by brands/companies (Pace, 2008), it is clear that UGCs are somehow competing with those directly generated by the companies (Producer Generated Content, PGC). Moreover much UGC across various media is brand-related and has the potential to shape consumer brand perceptions (Smith, Fischer & Yongjian, 2012) but, to our knowledge even if there are some studies in literature devoted to UGCs (Cheong & Morrison, 2008; Krishnamurty & Dou, 2008), only a few analyze the success of UGCs contents in terms of consumer views and feedback.

Although some previous research has already examined the role of Web 2.0 tools (Hawkins, 2009; Costantinides & Fountain, 2008; Tuten, 2008) and the possible uses and benefits for companies, also in the sport field (Waters et al., 2011), contributions remain mostly descriptive and anecdotal. Considering the most famous online video sharing platform being YouTube, there is a lack of studies concerning which kind of video is most appreciated

in terms of views by users and which kind of video generates any kind of reaction from the users. Only one study (Kruitbosch & Nack 2008) provides some evidence that professional videos are more popular than the users' created ones.

This study is focused on the sport field for two, main reasons: first because supporters are particularly keen to be active, and they often create communities (fan clubs) around their favorite teams, so interaction among fans and between the fans and their favorite football club is a standard for this sector; secondly because sport companies have become more professional over the years and they are increasingly investing in their brands, which are often considered the most important asset of sport clubs (Bauer, Sauer & Schmitt, 2010).

This study aims to understand the consumers' preferences towards sports brand-related contents, generated by both supporters and clubs. We can refer to video success, and so measure it from two main perspectives: passive and active. In fact, online content could be: 1) passively watched/read by users or 2) create engagement, i.e. users can actively interact in some ways. Both behaviors generate value for the concerned companies, as confirmed by metrics developed and used to evaluate Internet websites, and by online advertising models (Danaher, 2007).

## **Literature review**

Even if there are only a few studies that examine the reason of success in terms of views (Kruitbosch & Nack 2008) and consumers' active reactions to Web 2.0 contents, the existing literature provides nevertheless some useful references for other closely related topics. Studies concerning online and brand community (Grant, Heere, & Dickson, 2011; Devasagayam & Buff, 2008; Ahonen & Moore, 2005; Dholakia, Bagozzi, & Pearo, 2004; McWilliam, 2000; Armstrong & Hagel, 1996), consumer behavior on social media and Web 2.0 ecosystem ((El Ouiridi *et al.* 2014; Hanna, Rohm & Crittenden 2011; Berthon, Pitt, &

Campbell 2008; Daugherty, Eastin, & Brigh 2008; Berthon et al., 2007; Kucuk & Krishnamurthy, 2007), UGC and word of mouth (Ding et al., 2014; Cheong & Morrison, 2008; Daugherty, Eastin, & Brigh, 2008; Krishnamurthy & Dou, 2008) were analyzed in order to provide a first framework for our research. Most of these studies are not specifically related to sport companies but scholars have become accustomed to use and/or adapt such frameworks related to corporate brand in order to analyze this particular kind of businesses (Grant, Heere, & Dickson 2011; Bristow & Sebastian 2001). In fact football clubs, similarly to any other companies that operate with their names on the market, can be examined and seen as brands. As any other companies, they also sell products and more specifically their core products are events (i.e. football games) and they also can be assessed in terms of their brand value. For example Manchester United is a football club and its brand value stands at \$ 269,000,000 according to Forbes<sup>1</sup>. The main difference with brands that do not operate in the sport field is mainly related to their customers' (fans) behavior since in general these are loyal (there is no brand switching) and keen to have a relationship with the company because they see themselves as part of that organization. Every football club has one or more fan clubs that are basically communities (Heere & James 2007) and at the same time they try to create their own community, so for all these reasons the literature devoted to the analysis of the behavior patterns of users of communities and their Web 2.0 platform may be also applied to the specific topic we are dealing with.

First of all, scholars confirm that consumers are changing their role, creating online content relating to companies and becoming what they call “creative” or “invading” customers (Vescovi, Gazzola & Checchinato, 2010; Berthon et al., 2007). They also state that online users might be divided into different categories (Bernoff & Li, 2008) where two

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<sup>1</sup> <http://www.forbes.com/pictures/mlm45jemm/2-manchester-united/>

opposite groups can be identified: those who create the content and those who passively enjoy such content. This second category might also include the so-called “occasional makers”, since they contribute to the success of certain content in commenting, spreading or sharing it with other people. This thread confirms our research assumption that users also passively enjoy content uploaded online by other users or by companies. In defining features able to influence the success of content in terms of views and feedback we found three main threads that could be applied to this topic: 1) the subject of the content, 2) the source that creates the content, and 3) the recommendations. In fact, according to Berthon, Pitt, and Campbell (2008), the topic of online resources plays a key role in influencing the success of video, ads etc. The creation of online brand communities is therefore strictly related to the generation of online content (UGC), which is encouraged by the traditional Web 2.0 tools (Costantinides & Fountain, 2008) and stands out as a very attractive marketing tool for sport clubs. Since UGC are part of the brand community contents, literature concerning virtual communities could be helpful to define the concept of categories of content. Usually communities might be subdivided into two major groups according to the kind of contents they share: “rational”, i.e. which is mainly meant to convey information; and “emotional”, which deals more specifically with the interaction among users/members (Devasagayam & Buff, 2008; Armstrong & Hagel, 1996). The same classification is to be applied also to the UGCs as they might be emotional or rational too.

A second thread concerns the source of such contents. The source of a message in a communication process could affect the receiver’s feedback (Wells & Hackanen, 1997; Wilson & Sherrell, 1993), so it has a role in shaping the users’ behavior. Knowing that Web 2.0 content is created both by the fans and the football clubs we can assume that sources of messages can generate different feedbacks from users, but studies on that specific topic are still at an early stage of development so that it remains difficult to determine if UGCs are

preferred to PGCs. To be considered UGCs, online contents need to fulfill some requirements, such as being published on a public and accessible website or social network; they need to demonstrate creativity and effort, and must be created by consumers in a non-professional way (Kaplan & Haenlein, 2010), therefore, they are usually of poor quality in terms of design (Waldfoegel, 2009). Previous research concerning word of mouth compares content created by companies with content created by consumers (Goldsmith & Horowitz, 2006; Sussan, Gould, & Weisfeld-Spolter, 2006) but the main subject of these studies refers to product recommendations and not to creative content. As Cheong and Morrison (2008, 38) state “UGC has been closely aligned and often confused with eWOM, the two differ depending on whether the content is *generated* by users or the content is *conveyed* by users”, and the lack of information about consumers’ use of those two different contents points out and cements the need to study this topic. Another research that compares user and firms generated contents deals with the comments posted in response to the official advertisings and the consumers generated advertisings for a product: Pehlivan, Sarican and Berthon (2011) found out that there was no indication of a source effect.

It is generally assumed that for an iconic brand - i.e. a brand related to a so-called ‘myth’ or to outstanding, once-in-a-lifetime performances - consumers use ritual actions to experience the myth when using the products (Holt 2004) and are keen to have information about it – so in such case contents provided by a company (PGCs) are likely to enjoy more interest than those that are posted by other users (UGCs). If this assumption is confirmed, we are likely to validate the so-called theories of tribal marketing (Cova, 2003) as well as those related to the brand community that encourage companies to create and provide their clients with contents and spaces. Football clubs could be considered as being able to generate much more successful content than their fans since they employ more (skilled) resources and they also have access to sources dealing directly with the products and services they provide the

market with (usually games, athletes, merchandising etc.) However, to be successful PGCs are to be developed according to the fans' specific needs and have to differ from off-line contents, such as videos and images created for TV channels, in order to capture reach, but also intimacy, and engagement.

A third thread that concerns the intrinsic feature of Web 2.0 is the content recommendation and diffusion. To be known and shared, in fact, online contents have to be spread and the traditional Web 2.0 tools are definitely enhancing such a process. Web applications allow users both to extract content from the websites where they were originally posted and to carry out their research through social tags, social bookmarks and favorites, tools that recall concepts like the general intelligence or the so-called folksonomies (Hamill, Attard, & Stevenson, 2009; Šnuderl, 2008).

Therefore, two main research questions are posed to explore the features that affect the success of contents:

RQ1: What are the determinants of passive videos watching (videos views)?

In particular, starting from a review of the literature we can assume that three kinds of contents influence this passive behavior even if we do not know if they affect it in a positive or negative way. These are: subject, source, and recommendations diffusion. So we can split down the first main question as follows:

- RQ1a: Does the content subject have any influence on the success of the video?
- RQ1b: Do users prefer UGCs or PGCs?
- RQ1c: Do recommendations influence the success of such contents?

Moreover while reach can be achieved in large numbers, it often does not translate into a true exchange with the users (Hanna, Rohm & Crittenden 2011). Therefore the second research question deals with the success and return of a video in terms of active behavior:



RQ2: Which are the content features able to produce a pro-active feedback from users after they have watched a video?

## **Methodology**

### *Sampling method*

In order to achieve our goals, we analyzed a series of videos – UGCs and PGCs – posted on YouTube and devoted to clubs having participated in the first and second highest divisions of the Italian football league. YouTube was chosen as the platform for this analysis because of the huge success this website has been achieving over the past year. Although some previous research has already studied the role of YouTube as a new media channel used by companies to either communicate to their stakeholders (Haridakis & Hanson, 2009; Kaplan & Haenlein, 2010; Pace, 2008) or obtain data and contents (Huberman, Romero, & Wu, 2009; Waldfogel, 2009), there is little research concerning the factors affecting the number of views and feedback responses (Kruitbosch & Nack 2008).

The first step of this research consisted in collecting and classifying UGCs and PGCs uploaded on YouTube related to teams that played in the first and second highest Italian soccer leagues. It should be noted that to post a video on YouTube, the user has to create his/her own channel, that represents his/her profile, and therefore also his/her personal interests, passions and so on. This means that the channel represents the source of the videos.

In order to get a representative sample and to compare videos posted by users with those generated directly by the clubs, we searched for all channels featuring a kind of passion for a certain team competing in the Italian first or second division. We had to search for channels, instead of single videos, since they provide information on the user's profile, as

well as about videos, favorites, etc. so that we could identify who had posted the contents we were going to analyze.

Moreover, we searched for these channels through a series of tags based on the official denominations of the clubs, their traditional colors as well as the most common nicknames (such as Juve for Juventus) available on Wikipedia or on the online fan communities.

Then, considering that having at least one subscriber was perceived as the minimum threshold to identify the channel as being attractive, the analysis was restricted to the channels featuring at least one subscriber. Moreover, since users can post videos relating to different topics, we opted for hiving off those channels that featured videos portraying the passion for a certain team from those displaying also more generic contents, thereby focusing on channels that had at least five videos related to the team and where at least 50% of the uploaded videos were related to the club itself.

The final sampling of our research consists of the three most viewed videos available on each of these channels, in order to identify those having enjoyed the most success among the users and at the same time to obtain a sample that stands at about 10% of the total population (videos related to the identified supporters' channels were in fact 3,845). The availability of channels related to the various clubs was assessed about a week after completion of the national leagues, in order to have stationary data in terms of access and upload that were therefore likely not to be influenced by the sportive success of some teams or controversies on facts and figures of the competition.

### *Measurement*

In this research, the video is the unit of analysis, since it represents contents that users enjoy. In terms of measurement, YouTube videos can be considered as web pages because they have a single domain and metrics refer exactly to them. For each video the following

statistics available on YouTube have been collected: number of views, uploading day, number of comments, total amount of ratings, number of users that tagged such videos as their favorites, number of times the video was clicked on after having been embedded on another website<sup>2</sup>.

Generally, the measurement of success of a web site depends on its purpose (Hong, 2007) and the purposes for uploading YouTube videos are generally related to obtaining both views and interactions from users. Therefore, in order to measure the success of YouTube videos we use the concepts of passive (RQ1) and active (RQ2) user behavior.

### *Contents classification*

In order to answer to the two research questions, RQ1 and RQ2, all videos have been classified according to their content. The criteria for the classification start with very specific sub-categories that were then regrouped into 5 major categories (see Table 1). As discussed in the literature review, online contents can be divided into “emotional” and “rational” (Devasagayam & Buff, 2008; Armstrong & Hagel, 1996). These two categories are too wide to generate homogeneous reaction from users, therefore we decided to split the “emotional” videos in three different sub-categories, i.e. those displaying “*celebrative content*”, “*fans starring in the video*”, and “*controversies*”. The category “*fans starring in the video*” suggests, in fact, that the emotional subject is more related to fans than to the brand, whilst the category “*controversies*” suggests that we are facing a negative emotion, such as anger or impatience. Moreover, starting from the concept of brand advocacy (Cova, Giordano, & Pallera, 2007), videos featuring negative contents or controversies along with other teams or related to the refereeing have been separated from the others as they could generate a different

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<sup>2</sup> This last information is provided by YouTube for the five most clicked links.

user behavior (Cova & White 2010). In the sport field feedback related to controversies takes the form of defensive comments from fans of opposing clubs or criticism of people not directly related to the club itself, such as the referees. That kind of feedback is not that relevant for the company as it does not bring any useful information or positive input.

We have also identified one category under “rational” contents, named “*passive content*”, while those videos that could not be classified into the previous categories were regrouped into the last category, named “*other contents*”.

Table 1. Categories identified to classify the contents of the videos

Contents description	Category	
Videos displaying fans and their actions in and outside the stadium	Emotional	Fans starring in the video
Videos celebrating the team, a single player or anyway the passion people feel for that club		Celebrative content
Controversial or violent content addressed to the referees or to opposing teams		Controversies
TV video reporting on the team, highlights and additional contents related to the team and its performance	Rational	Passive content
Various videos displaying contents that are not included in the above categories		Other contents

The traditional content analysis (Collis & Hussey, 2003) was not applicable as the study deals with videos mainly related to fans and football matches. Moreover, analysis of Web-based messages adds new complexity to the process of content analysis (Hwang, Mcmillan, & Lee, 2003; McMillan, 2000).

The methodology for searching for and representing visual information is still at an early development stage. Although sport videos have been explored before (Rui, Gupta, & Acero, 2000; Sahouria & Zakhori, 1999), most studies do not refer to the content in terms of

topics of the video, but mainly to the content of the scene - such as shots in basketball - and mainly from a structural point of view (Hanjalic, Lagendijk, & Biemond, 2001; Huang, Puri, & Liu, 2000), which is not in line with the purpose of this research. Moreover audio contents mainly provide either songs celebrating single players or the football club, or dialogues among fans that is far from our purpose of classifying the videos as a whole. Furthermore, trying to transcribe the contents could have been too subjective and not meaningful for the purpose of this study. So, to deal with the generation of contents, topics have been first classified (Table 1) in the above mentioned five categories to move then on to the analysis of videos and descriptive statistics of the sample.

#### *Dependent variables*

In order to measure the success of videos in terms of passive enjoyment (RQ1), we used the daily number of views. This measure can be associated to the general concept of site exposure, which refers to the total number of visitor sessions at a website in a specific timeframe (Novak & Hoffman, 1996). The use of metrics related to website traffic is well known in literature (Alpar Porembski, & Pickerodt, 2001) and number of views is the only traffic-related variable available on YouTube. Moreover, considering videos as a website page, we can state that views represent a good metric for monitoring the passive enjoyment.

The kind of feedback generated by users in response to videos they have viewed represents another way to measure the success of videos because the interaction is one of the key capabilities of the Internet (Palmer, 2001). Therefore, in order to answer the second question, i.e. RQ2, and to compare videos that have received different numbers of views, a specific index, called Index of Activity (IA), has been developed. This index, allows us to put

the number of views beside an active feedback by the users in order to identify a relationship between these measures, and it has been calculated as follows:

$$IA_i = \frac{V_i}{C_i + F_i + R_i} \quad (1)$$

where  $i=1, \dots, N$  ( $N$  is the number of videos observed);  $V$ ,  $C$ ,  $F$  and  $R$  are the average daily measures respectively of the views, comments, favorites, and ratings (see Appendix A for more details). Therefore, the  $IA$  is the ratio between the daily views of a video and the daily feedback it received (daily comments, favorites, and rates).

To understand if a video was able to generate a number of interactions higher than the average one for the sector, so performed better in comparison to the competing videos, we compare the value of the index calculated for one video, that is,  $IA_i$ , with the average index ( $\overline{IA}$ ), calculated from the entire sample using the mean value of  $V$ ,  $C$ ,  $F$  and  $R$ . If the value of the  $IA_i$ , calculated for the  $i$ -th video, is lower than  $\overline{IA}$ , the  $i$ -th video is likely to generate active interaction with the users since the amount of views that are necessary to get a comment, have it bookmarked, and have it rated stands below the average. In doing this comparison, a dummy variable ( $A$ ) was calculated as follows per each video:

$$A_i = \begin{cases} 1 & \text{if } IA_i \leq \overline{IA} \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

Then, this dummy variable was used as the dependent variable of the analysis created in order to answer to RQ2, for example, which are the content features able to produce a proactive feedback from users after they have watched a video.

#### *Data processing and independent variables*

In order to compare results related to videos posted on different days, all data have been transformed into daily average data.

To test our assumptions, we first carried out a descriptive analysis of the sample. Then, we investigated the interaction occurring among the different variables and their influence on the total amount of views videos are enjoying (RQ1). After that, we have analyzed the interaction existing between the “A” dummy variable and the contents of the video, in order to determine which topics are likely to get a more active involvement of the users (RQ2).

To achieve the first goal (i.e. to identify the factors influencing the passive enjoyment of the video – RQ1) a multiple linear regression model has been applied. As explained above, views are the dependent variable of this regression model. Consistently with RQ1 we chose as independent variables (see Appendix A for details):

1. the content of videos: the five categories have been transformed into dummy variables (Passive video, Controversial video, Celebrative video, Fans starring in the video, Other video) in order to verify their dependence from the number of views (RQ1a);
2. the source (clubs or users) that has been generating the video (Official) (RQ1b);
3. the number of times a single video has been recommended (F). We assume that if the video has been marked as a favorite resource by a single user, this is likely to increase awareness. Moreover as additional variable of recommendation we also consider the number of times a single video has been viewed after it has been posted on another website (CL). This is a kind of measure of recommendation, since users are viewing videos taken from YouTube by other users and embedded in other websites, thereby spreading the content through the web (RQ1c);

To achieve the second goal (i.e. to identify the features influencing the active enjoyment of the video – RQ2) a logistic regression model has been applied. The dependent

variable is the dummy A and the independent variables are related to the video categories (see Appendix A for a description).

### Description of the sample

The YouTube channels fulfilling the above requirements are 125; 86.4% of such videos deal with teams competing in the first division of the national league. The population consists of 3,845 videos; at first our sample included the three most viewed videos displayed on such channels, with a total of 375 units but the final sample used in this research consists actually of 374 videos because one was invalidated as data had not been correctly entered. Table 2 summarizes the main descriptive statistics related to the videos. It has to be pointed out that on average videos have been viewed 138 times per day and they have been receiving 0.30 comments per day.

Such data display a high variability: few videos have been viewed many times and the majority of the videos included in the sample have been played only by a few users, thus recalling the long tail model described by Anderson (2006).

Table 2. Characteristics of the sample

	Mean	Median	Min	Max	Interquartile range
Views (V)	138.32	24.72	0.24	8681.75	72.32
Comments (C)	0.30	0.05	0	22.83	0.17
Videos* Favorites (F)	0.26	0.05	0	16.75	0.14
Ratings (R)	0.23	0.05	0	5.17	0.14
Clicks to Link (CL)	7.57	0.44	0	610.50	2.23

\* see Appendix A for a description of these variables.



Having a look at the 125 channels included in the sample, only four are to be considered official (PGC), since they have been created by the clubs themselves (all of them playing in the highest division), whereas the remaining channels have been generated by supporters or other people that are anyway not the owners of the brand/club. Table 3 summarizes the average values of the variables that describe the videos, divided according to their source (PGC/UGC) in order to compare these two categories.

Table 3. Mean value of each quantitative variable regarding videos depending on official nature of their respective channels

	PGC (Official)	UGC (Non-official)
V	1479.30	93.87
C	0.78	0.29
F	2.63	0.18
R	0.96	0.20
CL	20.08	7.16

Such groups show real differences, especially as far as the amount of average views per day is concerned: such values are indeed much higher for those videos that have been posted on official channels. Coming now to the contents of videos, Table 4 shows that views are mostly related to informative contents, such as videos showing news about the football clubs or performances by a single team and videos that users do not create, but take from news sites and then share on their YouTube channels. This confirms that fans do not refer to a single medium to get the information they are looking for, but actually they combine different devices such as television, tablets, smartphones and PCs. The Web, therefore, becomes a tool that sports organizations are able to exploit in order to submit their contents with much more flexibility in terms of both time and space.

About 50% of the videos belong to the categories that actively involve consumers such as videos with a celebrative content (28.34%) or videos starring the fans themselves (22.46%) where there is an even stronger active involvement, since such resources deal directly with the fans and the kind of activities they set up to support their teams in and outside the stadium, through - for instance - choirs or choreographies.

Table 4. Frequency of videos with reference to the category they belong to

Category	Composition (%)
Passive/informative content	36.36
Emotional content	28.34
Fans starring in the video	22.46
Controversies	5.35
Other contents	7.49
<i>Total</i>	<i>100</i>

Coherently with the literature devoted to the brand communities, clients are interacting by sharing activities and experiences they have been living through and that were somehow related to a certain brand (Kozinets, 1999). The availability of such videos seems also to validate the theories developed about the brand property, which has been conceived as belonging also to the customers (Berthon et al., 2007) since they can create channels where the real protagonists on stage are the fans themselves and their interaction with the club. Finally, a mere 5.35% of the videos deals with controversies and therefore we can assume that generally users are not as interested in such topics as the people responsible for football clubs have traditionally believed (Checchinato & Gazzola, 2009).

By crossing the video categories along with the descriptive variables (Table 5) we can notice that the highest values – in terms of daily average views (V), ratings (R) and favorites

(F) – are registered for the resources that display celebrative content. It is also interesting to point out that videos having controversial contents do obtain the lowest figures in terms of daily average favorites. However, a high value registered for the daily comments may derive from customers feeling they are supposed to somehow defend their brand, thus confirming the importance of brand advocacy (Cova, Giordano, & Pallera, 2007).

We can also notice that videos starring fans are the least commented, viewed and rated. Such a low value registered for all those variables is probably due to the low quality of the videos' images (Kruitbosch & Nack 2008).

Table 5. Average values of the descriptive variables according to the various video categories

		Passive	Celebrative	Fans starring	Controversies
Video	V	121.78	211.50	51.99	67.91
	C	0.38	0.25	0.16	0.34
	F	0.14	0.48	0.17	0.12
	R	0.22	0.27	0.12	0.14
	CL	10.37	4.39	8.63	5.17

## Results

As for the exploratory purpose of our research to answer RQ1, we opted for verifying the possible linear correlation existing among the quantitative variables that describe videos (see table 6). Such correlations, even though they differ in terms of their intensity, are all positive and the stronger linear relationship occurs between the average daily views (V) and favorites (F).

Table 6. Correlation matrix related to the quantitative variables describing the videos

	V	C	F	R	CL
V	1				
C	0.39	1			
F	0.91	0.18	1		
R	0.46	0.75	0.41	1	
CL	0.51	0.77	0.35	0.55	1

Since views are supposed to be an important factor in determining the success of an online resource, it is necessary to verify whether there is a linear relationship associating views to the independent variables identified.

The regression was estimated using a stepwise robust method in order to correct the possible heteroscedasticity of the error terms. The robust regression was estimated by using White's robust variance-covariance matrix to generate robust standard errors for our statistics (White, 1980).

Stepwise results are presented in Table 7 - therefore only significant variables are reported - and the complete list of variables used in the model is described in Appendix A.

The relevant independent variables are likely to provide us with good estimates about the dependent variable ( $\text{Adjusted } R^2 = 0.879$ ) and they also reflect the original assumptions: the V variable increases as long as the video was posted on an official channel and there is also a positive relation along with the CL variable as well as with the F variable; on the other hand, V decreases in case of videos featuring fans.

As far as the second research question is concerned, a robust logistic regression model has been adopted to verify whether the category the video belongs to is likely to stimulate an active feedback from the  $i$ -th user ( $A_i=1$ )<sup>3</sup>.

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<sup>3</sup> As this analysis was carried out, three videos posted by Sampdoria football club have been removed from the sample since, after a short period, the club itself decided to avoid any kind of interaction with the users.

Table 7. Determinants of the views

Independent variables	Coefficient*	Robust Standard Error
Official (PGC)	381.30	167.36
F	392.97	68.43
CL	3.02	1.16
Fans starring in the video	-63.75	32.38
Constant	14.89	15.06

\* Number of obs. =374; Adjusted  $R^2 = 0.879$ ; cut-off value  $\alpha=0.05$

This condition is verified through a single category (pseudo- $R^2$  of McKelvey & Zavoina (1975) = 0.125): if the video displays a passive/informative content, the chance of getting an active behavior from the users tends to decrease by 76% (Table 8).

Table 8: Robust logistic regression model estimates about active feedbacks coming from the users

Independent variables	Coefficient* (Odds Ratio)	Robust Standard Error
Passive/informative	-1.42 (0.24)	0.23
Constant	0.45	0.13

\* Number of obs. =371; McKelvey and Zavoina's  $R^2$  (1975)= 0.125

Videos that are very similar to television resources are those that enjoyed less feedback coming from the users. This result validates the assumption that to get a kind of interaction with the “surfers”, videos posted on the Internet do not have to be created with the same criteria that are normally exploited for television and that their success is strictly resulting from the provision of ad-hoc contents (Cova, Giordano, & Pallera, 2007).

## Discussion

The aim of this study was to examine the features that influence the success of YouTube videos in terms of passive and active user behaviors. The above analysis has increased the knowledge about UGCs and the users' preferences about such resources in the sport field, providing also some information that is likely to support and help the sport brands in addressing or modifying the kind of feedback they have been receiving.

No one of the categories used to classify video contents is able to stimulate more views or active behaviors than others, but at the same time some categories generate less views and feedbacks: the category "fans starring in the video" produces less views and the informative contents generate lower interactions. . Therefore we can conclude that users do not prefer watching other fans as actors in the videos and are less engaged if videos display informative content.

Concerning the contents, videos containing controversial content are more often commented than the average (0.34 versus 0.30), but at the same time they are the least chosen as favorites (Table 5). It confirms that consumers are loyal to the brand and they are interested more in getting news than in provocative contents (Kozinets, 1999). Comments usually aim at defending the brand.

Results confirm that UGC compete with PGC in attracting the fans' attention, as both UGC and PGC obtain views and feedbacks, but users prefer watching videos created by their favorite football clubs. These findings validate our research question concerning the role of the source in affecting the number of views registered for a certain video. Moreover this finding suggests that the source of messages still has a key role in generating feedback and so the classical communication model (Lasswell, 1948) could be useful also in the new media environment even though with some updating. It is very common to find on the Internet first

information generated by consumers about a certain company on unofficial pages, and only afterwards on the corporate website (Kaplan & Haenlein, 2010). The fact that the fans prefer PGCs could be consistent with the issue of source credibility as in a context such as Web 2.0 people do not always know who uploads documents and writes news and comments, so a well-known sender positively affects the passive enjoyment of contents.

The important role of recommendations and contents diffusion in increasing the number of views of videos is confirmed: favorites and clicks on embedded videos have a positive and significant impact on the average views per day (see Table 7). This finding supports the idea that word of mouth is an important communication tool on the Web as well (Chu & Kim 2011; Riegner, 2007).

This study is an initial investigation on success of content created both by firms and users. As such there are some limitations further research will need to address this topic in the future. Even though the classification of the videos according to their contents depends on pre-determined criteria chosen by the researchers, it is still somehow associated with the researchers' interpretation. Moreover, the index of activity used to evaluate the users' behavior does not allow identifying a range of values but refers simply to the average of the sample. This index is likely to be applied also to other topics, but the threshold value separating active and passive involvement should be revised according to the peculiarities of any new eventual new area of study.

### **Managerial implication**

In spite of such limits, there are some useful managerial implications deriving from the results of this study, namely: the kind of feedback such content enjoys in terms of its views on YouTube and the active behavior of users enjoying such content. The tendency that

users display in creating online content confirms the concept of commonly owned brand (Berthon et al., 2007). If clubs are interested in using the web to interact with their fans or in creating online communities, they should therefore develop communication patterns that are not addressed to the single fan but to the entire community. Such communication activities are therefore not to be conceived as two-way, but as addressed to a multi-nodal network (Rheingold, 1993). This is even more evident for common platforms, as they feature both UGCs and PGCs, with the latter being the most viewed shared resources. Despite the specific field of this research the provision of an official resource is to be considered as an opportunity to start up a dialogue and communicate with the consumers, who otherwise would have to refer only to the feeds that have been posted by other users, without any feedback for the firm that has also no chance to monitor such materials in an effective way.

The results of this study show that contents generated directly by firms are the most viewed resources posted online, thus confirming that also in the sport field consumers use multiple media to keep informed about their passions and at the same time they go almost anywhere in search of the kinds of entertainment experiences they want (Jenkins 2006). Sport companies do not seem prepared to completely fulfill this need, since there were just a few – 4 out of 125 – official channels, but nevertheless they have been enjoying more average views than the unofficial ones. Moreover, official channels have a positive and significant influence on the course of such views (see Table 7). In comparison with users, football clubs have access to more resources, support and sources that are likely to generate content; at the same time fans appreciate and recognize the authority and reliability of the original source, especially in such a domain as football where news is coming from several different sources. This is the main difference between sport brands and other brands that are related to the previously mentioned characteristics of the field. Football companies do not need to receive recommendations by users to be credible and reliable since their products (games,



merchandising, TV channel fee...) are bought for other reasons than their quality. Therefore the main reason of success of UGC, the credibility and reliability, does not exist in the sport field.

Clubs actively entering such platforms might somehow lose a bit of control but at the same time they can collect and have access to a plethora of relevant information about fans habit. Moreover, since companies do not have any real tools to limit the brand-related actions performed by their fans, still – through the generation of their own online resources – they can attract their target to their spaces inside the not proprietary platforms and in doing so not completely lost the audience reached by UGCs. According to the results of our previous studies (Checchinato & Gazzola, 2009) it should be noted that such dynamics are likely to affect also the corporate organization: within the firms there should be somebody who is in charge of managing the interaction with the users and identifying valuable content. Moreover, to fully display their potential, the online presence and the use of Web 2.0 tools have to be integrated into the general communication activities firms are implementing. Such an informative need is confirmed also in the analysis of the categories the videos included in the sample have been subdivided into; results let us understand that people are combining different sources to collect the information they are seeking for. At the same time, such contents are likely to generate a much more passive reaction among the users, since they are originally created to be passively viewed. Firms have therefore to differentiate the contents they are posting online from those placed offline, as they are not alternative but complementary. New professional skills, especially devoted to the generation of online contents, have to be developed accordingly (Cova, Giordano, & Pallera, 2007), in order to capture reach but also to generate engagement and enact the “prosuming” users (DesAutels, 2011). As far as views are concerned, fans are less interested in videos displaying themselves. That somehow means that fans are more interested in videos where the subject is the brand

(both in an emotional and rational way) than in videos displaying other fans. It has to be pointed out that the quality of these videos is generally lower than the others and Kruitbosch and Nack's (2008) findings reveal that this could be a reason for low performance for videos. This topic needs to be analyzed more in depth, taking into consideration all the variables that might affect users' reaction. In order to enhance the views of a video, companies have to encourage recommendations both to the bookmarks and to the sharing, and choose contents that are not have single fans as actors. On the other hand, in order to generate a reaction by the audience, videos displaying informative contents should be avoided.

Such information is very useful for clubs to improve their online presence taking into consideration the use or the implementation of simple Web 2.0 applications. Some examples are the provision of buttons that facilitate the sharing of contents on online platforms such as Facebook or Pinterest or their inclusion on blogs or websites especially devoted to social bookmarking activities such as Delicious. Since contents are positively affecting the views as well as the kind of feedback that is coming from the users, clubs should constantly monitor the online resources where supporters are discussing about their brand such as any other corporate brand. Aims and information collected in social network will be different, since sport brands do not really compete to gain customers' loyalty as traditional companies have to do, but they could enhance their revenues listening to fans' conversations and acting to fulfill their needs. Additional tools – similar to the index of activity – should also be developed in order to foster a better understanding of the feedback coming from the supporters, enabling the adaptation of the communication strategy accordingly. Through such a kind of monitoring, companies would provide users with the kind of contents they really appreciate and therefore they would also definitely get the active behavior they are longing for.

In the coming future this research might be extended to compare different online platforms in order to achieve a better understanding of the behavior patterns displayed by

fans/supporters. There is no evidence that the results of this study may be extended also to other websites that do not display videos but different kind of online content.

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## Appendix A

### Description of the variables that describe videos

Variables	Description
Quantitative	
V	Number of average views per day
C	Number of average comments per day
F	Number of average favorites per day
R	Number of average ratings per day
CL	Clicks that the video enjoys per day having been embedded into other websites
Qualitative	
Passive video	1 = video displaying a passive content; 0 = otherwise
Controversial video	1 = video related to controversies; 0 = otherwise
Celebrative video	1 = video displaying a celebrative content; 0 = otherwise
Fans starring in the video	1 = video starring fans/supporters; 0 = otherwise
Official	1 = video displayed on an official channel; 0 = otherwise