Social Talent Scouting:
A New Opportunity for the Identification
of Football Players?

Authors' contribution:
A) conception and design
   of the study
B) acquisition of data
C) analysis and interpretation
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D) manuscript preparation
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Elena Radicchi[A,C-E], Michele Mozzachiodi[B]

University of Florence, Italy

ABSTRACT

This paper investigates the diffusion of digital technologies within the football talent scouting process. A qualitative exploration based on open discussions and unstructured interviews with professionals involved in the football system (coaches, scouts, players' agents, etc.) provides insights about how new technologies are used for recruiting athletes. The findings, which are mainly in the context of Italian football, indicate a cultural and generational gap in the use of new digital tools that creates a mismatch between young promising athletes (demand side) and "senior" team professionals (supply side).

KEYWORDS

visual talent scouting, football players, new media

1. Introduction

The importance of talent scouting as a crucial mechanism for recruiting the best performers for professional teams is well known both in sports science (Abbott et al., 2005; Durand-Bush, & Salmela, 2001) and sports management literature (Brady et al., 2008; Taylor, Doherty, & McGraw, 2008).

Several sports organizations rely almost exclusively on human expertise for the process of talent scouting. In disciplines such as football, especially within the Italian context, it is still believed that domain experts (coaches, managers, and scouts) can effectively convert collected data into usable knowledge. In other European and American contexts, the sports industry has a longer tradition of collecting statistical data, especially in baseball and basketball. In recent years, new technologies (software for player analysis, player position tracking, multimedia online databases, etc.) have offered additional advantages, such as predicting particular player matchups and/ or forecasting how an athlete might perform under specific conditions.

Moreover, by making the analysis of players' actions faster and more tactical, these platforms facilitate the flow of information sharing and enable clubs to downsize their investments on talent selection.

In spite of the increasing proliferation of new media tools[1] in the sports sector, there is still a lack of scientific knowledge about the role and impact of new technologies on the talent scouting process. Indeed,

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[1] Most technologies described as "new media" are digital, often having characteristics of being manipulated, networkable, dense, compressible, and interactive. New media is also characterized by the variegated use of images,

sports-related studies have explored the use of new media and social media[2], especially regarding how sports clubs manage these means to build brand awareness and image (Wallace, Wilson, & Miloch, 2011; Waters et al., 2011), fans' motivations for interacting through social media (Stavros et al., 2013), and how athletes use communication applications such as Twitter (Pegoraro, 2010) and Facebook (Sanderson, 2013).

In light of these premises, this study is focused on the use of digital technologies within the sports supply chain. Specifically, the research questions to be investigated are as follows:

1. Which types of new technologies are the most diffused in the scouting of football talent?
2. Are professional football teams using new media to identify and recruit new players? If so, how?
3. What kinds of opportunities are offered by these tools, both for athletes (demand) and scouts (supply)?

The purpose of this paper is therefore to investigate the diffusion of digital technologies within the football talent scouting process, with a specific focus on the Italian professional context.

Analytically framed within the sports talent management approach (§ 2), the research is based on a qualitative methodology (§ 3). An initial exploratory investigation was carried out through open discussions and unstructured interviews with professionals involved in the Italian football system (talent scouts, coaches, sports directors, etc.). These open talks, combined with an extended analysis of online search engines, have provided us with a general idea about the most popular digital platforms used in the field of football for the recruitment of players.

Among the web-based tools that emerged from our analysis, we selected a specific and brand-new social network for football talent scouting, founded in 2014 in Italy. Access to this network's user database enabled us to identify the main features (§ 4.1) of people registered as members of this sort of online football scouting community. A web content analysis (Hastie et al., 2001) of this social network was also developed in order to understand the main motivations for participating in this kind of social platform (§ 4.2).

The last section (§ 5) of the paper discusses the main challenges posed by the new trends of using digital technologies in football talent scouting. Indeed, a strong cultural and generational gap along the football talent supply chain generates a mismatch between young promising athletes (demand side) and "senior" team professionals (supply side).

2. Talent management in the new media era

Since the 1997 publication of the study "War for Talent" by a group of McKinsey consultants (Michaels, Handfield-Jones, & Axelrod, 2001), the topic of talent management has received a remarkable amount of attention from practitioners and academics. For organizations across the globe, managing acknowledged employees is of strategic importance for maximizing their competitive advantage. This challenge is even more significant in the contemporary recessionary climate. Nevertheless, despite the growing popularity of talent management, its definition, scope, and overall goals remain unclear (Lewis, & Heckman, 2006).

A review of the literature shows that the label "talent management" is often a substitute for human resource (HR) management (Lewis, & Heckman, 2006). Scholars often limit their focus to particular HR practices such as recruitment, leadership development, succession planning, and the like. In other cases, authors focus on the management of talented people (Michaels et al., 2001; Smart, 1999). This theoretical background argues that all roles within the organization should be filled with "top performers" and emphasizes the management of poor performers outside of the company.

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words, and sounds (multimedia). Some examples include the Internet and websites, computer multimedia, computer games, CD-ROMS, and DVDs (Santomier, & Shuart, 2008).

[2] "Social media" emerged under the innovative concept of Web 2.0: multimedia and interactive tools that allow the user to partially or totally control content with regard to both the creation and distribution processes. Social media, also defined as "Consumer Generated Media" (CGM), including blogs, forums, news groups, social networks, wikis, podcasts, and virtual worlds, allow many-to-many communication and feedback flows (Weinburg, 2009).

Collings and Mellahi (2009) recognize an emerging stream of thought concerning talent management, identifying the key positions with the potential to differentially impact the competitive advantage of a firm. According to these authors, strategic talent management can be defined as

"activities and processes that involve the systematic identification of key positions which contribute to the organizations' sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organizations" (Collings, & Mellahi, 2006, p. 304).

The main point of this approach is the systematic identification of key positions rather than talented individuals per se (Collings, & Mellahi, 2006, p. 305). A talent management strategy then entails the development of a "talent pool" of high potential and high performing human resources that the organization can draw upon to cover pivotal positions requiring talented individuals. This approach involves the proactive identification of people who are able to ensure that key positions that may become available are carried out.

In sports as well, talent scouting has been the backbone of sports organizations' collection of knowledge for nearly a century (Vaeyens et al., 2008). Furthermore, the talent scouting system in the sports sector has often inspired talent management in business environments[3]. Traditionally, sports team personnel observe competing teams, compile reports on player weaknesses and opposing teams' strategies, and gather other useful information that may generate a competitive advantage (match analysis). This kind of scouting mainly has a tactical value. More complex and advanced scouting entails seeking out and evaluating new pools of talent (talent scouting). This process has a more strategic value.

Talented players are "strategic resources" in obtaining a competitive advantage over rival teams. Indeed, as many scholars in the industrial economic field have highlighted with the framework of the resource-based view (Barney, 1991; Grant, 1991, 2002; Penrose, 1959; Peteraf, 1993), firms are able to develop a competitive advantage if, and only if, they have superior resources that are protected by some form of isolating mechanism preventing their diffusion throughout industry (Barney, 1991; Grant, 1991; Penrose, 1959; Peteraf, 1993).

As with any other firm, even sports organizations can be considered bundles of tangible and intangible resources and capabilities (Wernerfelt, 1984; Barney, 1991; Grant, 1991). Specifically, in the sports industry the most relevant tangible assets are financial resources, in addition to sports venues and facilities. Besides brand and fan loyalty (Mahony et al., 1999; Gladden, & Funk, 2001), human resources are crucial intangible assets (Barney, 1991; Grant, 1991): the qualitative level of players is a strategic resource (Grant, 2002). Players are important assets for sports organizations because the performances of the athletes are the most obvious feature of team quality and success on the field. "Besides providing the sport event, they also contribute to the success of the product" (Zagnoli, & Radicchi, 2011, p. 253).

Players might be strategic sources for success off the field, as well. When athletes are "stars", they become a promotional tool for increasing the popularity of a sports discipline and the brand of a sports organization. They represent an important commercial tool not only for the sports entities, but also for their sponsors. New media help to set off a process by which the champion is transformed into a "role model" both on and off the field. Spectators and fans identify themselves with the star player and are spurred to imitate the athlete, increasing not only the sport's popularity, but even the sale of team and league merchandise. Therefore, it is clear that the sourcing of athletes might have a strategic significance for the sports club.

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[3] For example, the "Tech Draft" organized by the US high-tech industry to identify talented college software engineers, has been designed to be similar to the National Football League Draft. This is the traditional system used in American football for recruiting college football players to professional teams (http://www.draft.me).

The most successful teams are those that are able to identify the better athletes earlier than their competitors. Finding alternative, innovative, and less costly "channels" for advance recognition of promising athletes with the potential to excel in sports might induce clubs to sustain lower investments for development and training programs and therefore grant them a competitive edge.

Scholars have stressed five key stages in the talent scouting process: detection, identification, confirmation, selection, and development (Vaeyens et al., 2008; Williams, & Reilly, 2000). Traditionally, the phases of detection - that is, the discovery of potential performers who are not currently involved in the sport - and identification are considered to be the most crucial for predicting successful young athletes. There are different methods for measuring the current performance of adolescents; these entail a combination of physiological, physical, anthropometric, and technical variables within age-specific groups (height, weight, strength, speed, etc.) (Baxter-Jones et al., 1993; Malina, 1994; Malina et al., 2007). Some scholars (Van Rossum, & Gagnè, 2005) have suggested the monitoring of additional personal and interpersonal abilities and qualities (team building skills, self-management of emotions, values, intrinsic motivation, endurance under the pressure of competition, etc.).

Federations and teams have invested considerable resources in detecting and identifying exceptionally gifted youngsters at an early age in order to accelerate their development process. Scouts used to rely on manual methods to keep track of players' performances, and the traditional decision-making approach of counting on their intuition and observation on the field is still very important. However, sports organizations, especially within the North American context, have begun to embrace advanced analytics based on digital technologies to assess players' technical skills and their future success (Schumaker, Solieman, & Chen, 2010).

Applications of digital technologies are permeating the sports industry in many ways, such as with the collection of field data to monitor athletes' actions (speed, distance, ball possession, etc.), statistical analysis of opposing teams, predictive insights of fan experiences, etc. A recent and innovative trend involves the use of social media (e.g., Twitter, Facebook, etc.) to "observe" how young athletes behave on the web. The role and effects of social networks on the process of recruiting sports talent have, for the most part, been noted by practitioners. Sports professionals and club managers who annually meet at the MIT Sloan Sports Analytics Conference (www.sloansportsconference.com) acknowledge that social media has helped coaches and scouts more efficiently open a dialogue with recruiting targets (Trotter, 2012). Monitoring the Facebook and Twitter accounts of high school and college students allows for an accurate analysis of young promising athletes by discovering their personal attitude in a way that could not be accomplished even through a face-to-face interaction.

The identification and monitoring of young talents through the use of new media and social media would definitely be enhanced with the application of data mining (Azzalini, & Scarpa, 2004; Hastie et al., 2001), the extraction or "mining" of knowledge from a large amount of data. The techniques that can be used in the sports field to analyze young players' attitudes on social media are text mining methods, which concern keyword detection and the recognition of discussion categories. These tools may be a useful means for monitoring and modeling the individual behavior and personality of prospective athletes.

3. Research design and methodology

The main purpose of this paper is to explore the diffusion of new technologies for the process of scouting and recruiting football players. At a very preliminary stage of the research, we browsed and visited a large number of websites and platforms that apparently offered services for the scouting of sports talent. By using the Google search engine and selecting "football talent scouting" as a keyword, we extracted a list of online tools and then identified their main features.

During the second stage of the study, which took place between November 2014 and January 2015, we carried out open talks and unstructured interviews with sports experts[4], including football club directors, talent scouts, coaches, and managers responsible for federal youth development programs. The aim was to figure out the process of sourcing football players (see Figure 5) and to explore to what degree new technologies are used by football clubs for player recruitment, with a specific focus on the Italian context. These open discussions, together with the in-depth online research performed to detect and select specific websites and online platforms, contributed significantly to the conceptualization of digital and multimedia platforms used for the recruitment of football talent (see Figure 1, § 4).

From the most popular web-based tools used for collecting and analyzing the profiles of young football players that emerged from our analysis, we selected a specific football-oriented social platform called FB Player - Social Football Talent, an Italian start-up founded in April 2014. We chose FB Player because it is a completely new approach: it is not a repository of information filled and managed only by scouts/ staff (§ 4), and it is not a Facebook page where you can find data (pictures, video, statistics, etc.) about athletes. The mission of this social platform (www.fbplayer.com) is "to allow coaches and scouts to discover talents and unknown football champions. Moreover, it enables players to display their performance and to stay in touch with other players, talent scouts, football clubs and supporters all over the world"[5].

Despite the fact that this online community was designed to include athletes, coaches, scouts, and even fans, the majority of users are athletes. The main goal of the founders was to create a sort of "e-marketplace" where the demand (players) and the supply (coaches and scouts) would meet, exchange information, and stay in contact. This tool actually seems to mainly be an "open online window" where players, especially younger players, can find a place to gain visibility.

In November 2014, we first contacted the CEO and web marketing manager of this social network and obtained access to a dataset of more than 6,000 users. The time interval for data collection lasted from February to September 2015. The results of our research are twofold.

First, we focused on FB Player users' profile information (anonymous form) with specific attention given to those who registered as "players"[6]. This analysis was performed in order to describe the players' socio-demographic characteristics and technical skills. The database was organized in different tables where gender, age, nationality, and other indicators and information[7] were extracted and summarized. A "filling index" (for each field) was computed to estimate the reliability of each piece of information. These calculations were considered to be a significant index because they denoted the users' participation, their desire to become part of the community, and their willingness to tell others about themselves. An additional analysis focused more on the players' profiles, where different counting statistics were built (pro/amateur, football with 11/7/5 players, position on the field, personal skills, etc.).

Second, we developed a web content analysis (Hastie et al., 2001; Hsie et al., 2005) of multimedia content such as text, images, and videos posted on the public wall and on other significant public groups (e.g., "Official Group" and "Promising Youth"). Our goal was to determine young players' main motivations for being part of this kind of online community.

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[4] We had open discussions with professionals involved in different pro clubs in Italy such as Empoli FC, Modena FC, ACF Fiorentina, and US Sassuolo. Moreover, we interviewed a couple of FIFA Players' Agents and managers responsible for the Grassroots program development at FIGC.

[5] Although this online social platform was recently founded, some professional football clubs in Italy have started to consider FB Player as an additional and complementary channel for "detecting" young athletes. For instance, in 2014 Juventus FC launched a football contest that enabled members of FB Player to show their sports performance by uploading a video on the public wall. The young players whose videos received the most votes were allowed to participate in a skill test with the scouting staff of Juventus.

[6] A total of 5,279 users were registered as players, while the whole dataset included 6,671 members.

[7] Take for example: height, weight, gender, shoe size, shoe brand, birthday, country, team, position, amateur status, best video, field, federation, city, province nationality, "palmares", trial value, attack, creativeness, speed, strength, defense, mentality, career appearances, career goals.

For this web content analysis, the unit of study was the content of FB Player, and the coding units were the individual posts and comments uploaded on the public wall. With the use of the "R" statistical software[8] (using the "tm" /text mining/ and "word cloud" packages in particular), we performed an investigation of the main topics discussed on the social network. After extracting the words' frequencies, a ranking of terms was created, which we used to build a word cloud (see Figure 4). This word cloud is useful for understanding these statistics.

Our study also presents additional outcomes proposing a codification of posted content indicating specific categories of users' motivations for engaging in the social network (see Table 1). By using an inductive development approach (Mayring, 2000) without preconceived categories (Kondracki, & Wellman, 2002), the resulting classifications "flowed from the data" (Hsie, & Shannon, 2005, p. 1279), enabling a deeper analysis of the latent content. In order to determine the meaningful codes of motivations, we immersed ourselves in the FB Player public wall and repeatedly read the comments and posts. After reading the posts, labels for codes that reflected the different users' motivations emerged and specific categories were created.

4. Emerging digital platforms for talent scouting in football

The online exploration of websites and online platforms for football talent scouting and interviews with professionals operating in Italian teams and federations indicate that these new media generally pursue two main purposes:

a) to support the traditional "on-field" scout activities,
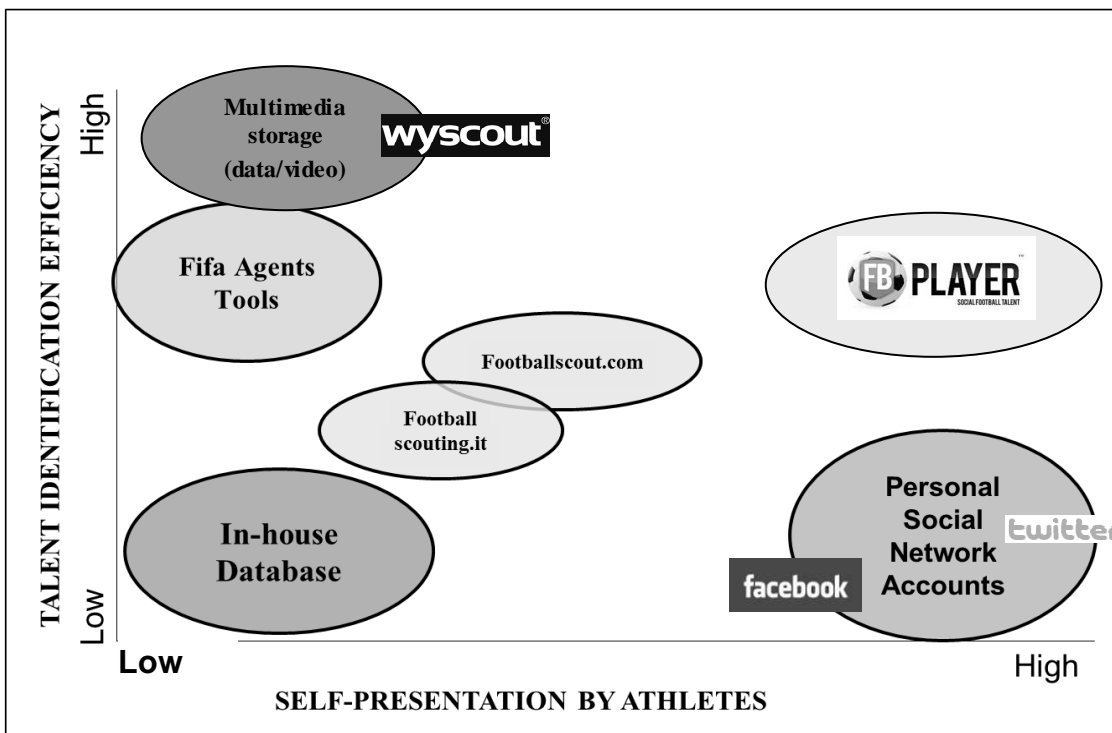b) to discover unknown talents.

Figure 1. Digital and multimedia platforms for football talent scouting
Source: own study.

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[8] The "R" software is a language and environment for statistical computing and graphics, and it provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, etc.) and graphic techniques (See http://www.r-project.org/about.html).

Figure 1 is a graphic representation of the most significant digital and multimedia platforms used for talent scouting. The chart is built according to two main dimensions. On the abscissa axis, the "self-presentation by athletes" variable indicates to what extent a platform enables athletes to co-participate in the talent scouting process. On the ordinate axis, the "talent identification efficiency" variable assigns an efficiency ranking to each digital tool depending on the extent to which the platform allows scouts to find new talents.

By matching the different degrees of these variables, it is possible to draw a complex of digital and multimedia tools for football talent scouting.

In-house databases are represented on the bottom (extreme left). On average, "almost all professional football teams store data in a central repository"[9] where only the club's professionals have access. Data are collected through an on-field observation and are related to known talents that have already been observed by scouts and belong to a specific club.

At the top of the graph are innovative tools that scouts might use to maximize the efficiency of the talent recruiting process and discover new players. These kinds of platforms are multimedia repositories for storing football-related video, audio, and text files, enabling teams to access data collected by private companies that sell the right to access content to clubs and federations[10]. Many professional sports organizations use these online tools. They are deconstructing the old big and expensive internal scouting network by outsourcing part of the process to external private organizations. Those companies, such as Wyscout, provide a "common" database accessible via the Internet for clubs that subscribe to the service. In this way, "football teams might apply for a first screening on players"[11]. Then they are able to contact and select only the players with the most talent.

As we move to the right (bottom), we find flexible platforms that enable users to sign up by themselves and fill out and publish their own profiles, adding information, pictures, and/ or video. The personal Facebook and Twitter accounts of young players might be used by clubs as additional channels for gaining information and evaluating personal and interpersonal abilities and qualities such as values, management of emotions, self-engagement, etc. On the other hand, players can use their social network pages to propose themselves as talents, display their sporting performance by uploading pictures and video, and keep in contact with a potential audience of coaches and scouts.

The empirical research sheds light on the rise of a specific "football-oriented social network" where athletes can sign up and create their personal and sporting profiles, trying to attract as many scouts as possible. The main purpose here is to "enable players to build a self-filled database available for a wide audience of potential sport clubs"[12]. These social media tools could provide sports teams with an opportunity to maximize the efficiency of the talent scouting process by reducing costs and investments and facilitating the flow and exchange of information.

4.1. The analysis of a "social platform" for football talent scouting

4.1.1. The main features of FB Player members

Our qualitative investigation outlined several kinds of digital and multimedia platforms (§ 4). In this section, we propose an analysis of the FB Player user database.

At the end of September 2015, FB Player had 6,671 members: 80% were registered as players, 15% as fans, and only 5% as coaches and scouts. Our analysis focused mainly on data related to members who registered as players.

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[9] Interview with Giovanni Ferraro, FIFA Players' Agent, November 26, 2014.
[10] See as an example the platform Wyscout: http://www.wyscout.com.
[11] Interview with Marco Lorenzi, League Analyst at Football Radar Ltd., December 15, 2014.
[12] Interview with Cristian Di Buccio, CEO of FB Player, November 20, 2014.

By filling out a profile form, entering details such as age, gender, nationality, and field position, and completing an online physical test, players can showcase their skills and get noticed by clubs, even by uploading their own pictures and videos.

Among the users who applied as players, 94.6% were men, and 5.4% were women. Although the number of female players is quite small, women's football is an expanding phenomenon in Europe in general and Italy in particular, and thus this number should not be underestimated[13].

The most interesting socio-demographic result concerning members who registered as players is related to their age and nationality. Young players aged between 15 and 18 years old, the so-called "Generation Y" who typically live on social media, made up 41.7% of the total, while 22.1% were even younger, at less than 15 years old.

These digital natives are usually positioned in contrast with those who can be defined as "digital dinosaurs"[14]. Especially in the Italian context, the "senior" generation of sports directors, coaches, and executives does not seem to be very open to the use of new technologies for scouting or managing simpler organizational tasks[15]. Football is still run by people who only have one way of seeing the game and do not wish to see their power or opinions challenged (Anderson, & Sally, 2013). Many football professionals from the early generation of scouts remain skeptical of new media.

In terms of nationality, young players who are members of the social network are mainly Italian (79.5%). This data is not surprising since FB Player was founded in Italy. Nevertheless, the other 20% of users come from different countries. Some of these countries, such as Brazil (2%) and Venezuela (1.6%), are traditionally considered to be among the best nations for scouting excellent players as they are more likely to contain a higher number of talented players. Even in these regions, not all passionate young football players have the opportunity to be noticed by European teams through the official channels. Thus, some players have begun using this kind of tool to gain visibility on the world stage, including youngsters from smaller and more remote countries, such as those in Eastern Europe (including Macedonia, Romania, and Estonia). Not all national federations in these countries have a well-defined vision for youth football development, and therefore the athletes do not have enough opportunities to showcase their performance skills to talent scouts and observers.
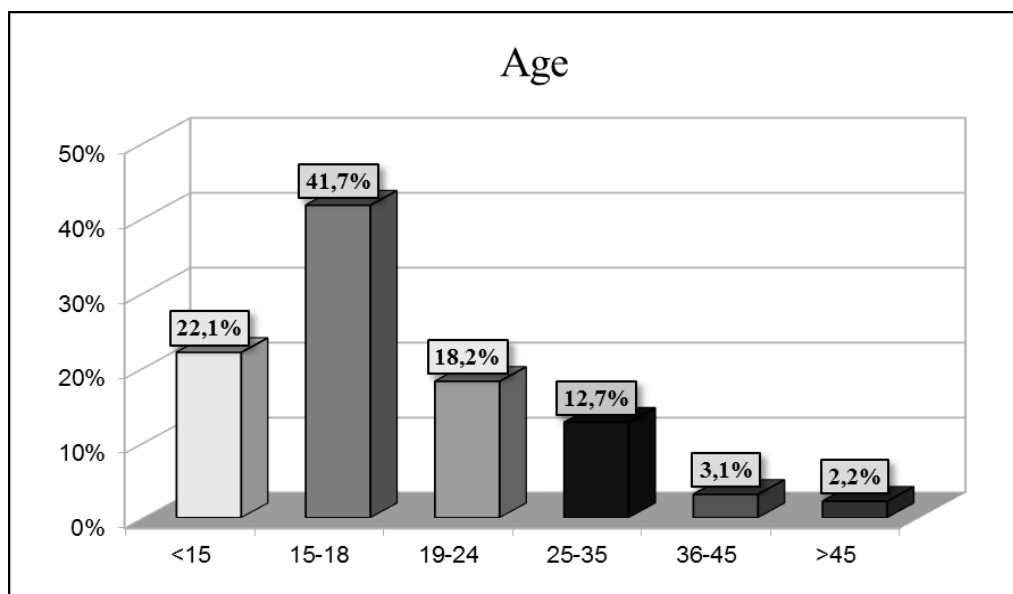

Figure 2. FB Player users: Age distribution

Source: own study.

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[13] According to FIFA, there are about 30 million women playing football at the international level (FIFA 2014).

[14] Interview with Cristian Di Buccio, CEO of FB Player, November 20, 2014.

[15] Some of the managers we interviewed revealed that the method of manually noting down players' performance results on a sheet of paper is still quite popular even among professional clubs.

When filling out the online form, players can also indicate their favorite position on the field, summarized in Figure 3.
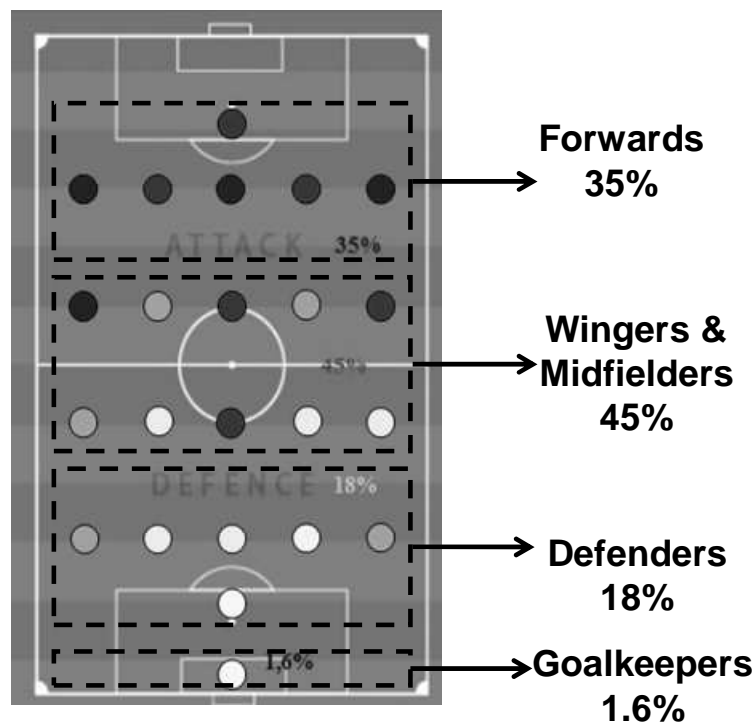

Figure 3. FB Player users: Position on the field
Source: own study.

Only 1.6% of users signed up as goalkeepers. This result is quite peculiar: it was expected that about 9% of users would be registered as goalkeepers, as they are supposedly one-eleventh of the total players. When progressing from defense to attack, the number of users for each spot increases significantly: 18% of users marked their position as defender, 45% as midfielder, and 35% as forward.

What is interesting to note is the high percentage of users in the attack positions. Even if is not possible to draw any statistical relevance from this piece of data, it reveals the fact that young people seem to want to play as forwards or strikers. These positions offer the highest level of visibility for players: the forward is the athlete who finalizes the match by scoring the goal. Forwards are usually very charismatic individuals, both on and off the field, and are role models beloved by fans and spectators[16]. Therefore, it is not surprising that so many youngsters state that they play in attack positions since they are looking for visibility and need to show off their skills.

4.1.2. Categories of motivation for using FB Player

Another step of our research on the FB Player online platform was a web content analysis of the wall and other specific groups. This investigation was conducted by taking into account all of the written content (statuses and replies) publicly shared on the social network by the members who registered as players. The

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[16] Since the establishment of the Balon D'Or Award in 1956 and its later integration with the FIFA World Player of the Year Award, it has, for the most part, been awarded to forward players. In recent years, the winners have alternatively been Cristiano Ronaldo, striker of Real Madrid FC, and Lionel Messi, striker of Barcelona FC.

"R" software enabled us to count and consider the frequencies of every significant word. To visualize the results of this analysis, we created a word cloud; the more frequently a word was used on the social network, the larger it appears in the word cloud.

As we can see from Figure 4[17], the word "video" is at the center of the graph. It identifies the precise direction users and website managers are aiming for: both parties post and comment on videos and ask for videos because they are trying, either consciously or unconsciously, to build something that we have defined as "talent multimedia curriculum". This is a kind of curriculum based not only on data and general information, but especially on videos, evolving and moving away from the traditional paper scouting reports.

Figure 4. The FB Player word cloud
Source: own study.

We are able to determine at least two other main discussion topics from the word cloud. The word "calcio" (football) and other lesser words such as "giocare" (to play), "squadra" (team), "gol" (goal), and also the names of some clubs, appear in order to showcase the passion that the users share for the sport. Other words, such as "bravo" (good), "ragazzi" (guys), and "amici" (friends), refer instead to the gratification of being part of a community and the sense of belonging to that community; this is the third main area that emerges from this analysis.

Other findings of the web content analysis underlie the users' main motivations for interacting on this football talent social network. Our data indicate that young players have four key motivations: visibility, passion, sense of belonging, and performance. Table 1 provides definitions of these motivations and their properties, as demonstrated by the users' posts.

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[17] The graphic result is in Italian because the web content analysis was conducted on the public wall of the social network where words were written mainly in Italian.

Table 1. Categorization of the motivations of FB Player users

Category	Definition	Examples
Visibility - Self-expression - Self-pride - Pursuit of consensus	Comments directed to the community displaying new channels of visibility and tools for searching for consensus	"I would do everything to play everywhere!" "I'm looking for a team in Italy." "I'm a talented goalkeeper… can you find someone better?" "Let's have a look to this! Are you able to do the same?" "Great performance!" "Please vote for me!" "I'd like to show how good I am." "My dream is to become a professional player. I can't wait to show you my value!"
Passion - Mimicking top players - Role models	Expression of passion for the "beautiful game" and displays of love and praise for players and teams	"Football is our life!" "Football is technique + head + heart." "Football is my drug!" "Ronaldo style!" "Imitation of Van Persie's goal!"
Sense of belonging - Community - Emotional connections - Common values/ symbols	Community-directed comments that reflect a desire for identification and interaction within a community of people who share the same passion for football	"I'm really happy to be part of this social network!" "Let's become a big community!" "You are great!... thanks, you are very good as well."
Performance - Skill fields - Giftedness - Freestyle	Comments directed to other users of the social network that proclaim the importance of technical skills and expertise in football	"Video to show on-field performance, speed, position…" "Best skills 1 vs. 1 and freestyle." "Don't lose your physical and technical creativity!"

Source: own study.

The first category of motivation noted in Table 1 is a strong expression of the search for visibility. Until a few years ago, young athletes had to hope that news of their talent would reach scouts by word of mouth. Today, young people see social networks as a means to stay connected with a potential audience of coaches and talent scouts and to display and show off their performance and athletic portfolios. Youngsters from minor and amateur football leagues in remote areas of Italy and other European countries are especially looking for new channels of visibility: their sports achievements are not normally "detected" by official scouting methods. Therefore, social media can help players increase their performance profile and exposure.

The second category is an emotional demonstration of affection for football, the "beautiful game", that we identify as passion. The attraction of sports as a means to experience and convey passion is well established (Vallerand et al., 2006). Many posts involving young players reveal a strong attachment to the discipline of football. This physical activity through the "recovering moments of running, jumping, and playing enables people to overshadow the routine actions developed in daily life" (Minerva, 1982). It produces a feeling of abduction, joy, and intense appreciation of the action (Arnould, & Price, 1993). Moreover, young players express a strong attachment to global football icons (e.g., Cristiano Ronaldo, Neymar Da Silva, Lionel Messi, Robin Van Persie) and exercise a latent need to identify with elite players. Inspired by football celebrities, often seen as role models (Yancey, 1998), youngsters usually escape from their daily lives and project their personal hopes of wealth, success, and social prestige onto the champions.

The third category to emerge is sense of belonging. People often choose sports to socialize and become part of a tribe. Usually, people who snowboard, surf, skateboard, or play football feel part of a "group". Besides the language of the rules and special equipment that they use, they also share a language that "marks" them (Cova, & Cova, 2002) and at the same time aggregates them. The posts published on FB Player reveal a very strong need to be part of a group. Social media enhances relationship building among young players by creating an online community. The football talent social network seems to be a virtual

place where young players with the same passion for football are aggregated to communicate, share, and discuss ideas and experiences, as well as to post pictures and information about themselves, leave messages about upcoming events, and link to specific websites. This "virtual tribe", although existing predominantly online, is also expected to meet in "real life" by strengthening and renewing their sense of affiliation to the community.

A final category of motivation is performance. Football continues to be an extremely popular sport around the world. The overwhelming popularity of football and the expanding global media visibility of football matches have generated a growing knowledge of the rules of this game. Moreover, kids and adolescents who spend a large amount of time playing football videogames (e.g., FIFA, Pro Evolution Football, etc.) are introduced to the mechanics of this sport. Videogames require an understanding of the rules of the physical sport to play the game (Consalvo et al., 2013). Not surprisingly, young players express a very good informational and analytical knowledge about football. They are also inspired by the "virtual" athletes and love to upload videos on the social network showing themselves doing freestyle moves similar to those that they see in the videogames.

5. Challenges and constraints of using new media to recruit football players

The primary aim of this study was to understand how digital technologies are employed by football teams to recruit talented players. Our investigation provides information about the process of sourcing athletes, which places talent scouts at the core of a complex network of relations (see Figure 5). Scouts play an intermediary role between football clubs and players and manage different sources of information about athletes from a variety of "nodes", such as FIFA agents, players' agents, satellite clubs, and former athletes, which in turn are related to other peripheral subsystems (personal contacts, small local teams, etc.).

Scouts are crucial "processors of information"[18], mainly informal and observed. Talent scouts go "on-site" to watch, collect data, and learn about players, making subjective judgments. On-field observation is still predominant.

In other sporting contexts, such as in the US, recruiting processes are increasingly becoming more sophisticated as clubs take advantage of rapidly developing communication technologies. With new media and social media, the scouting process can start earlier and be completed faster. The Internet can be a valuable tool to scouts for gathering information about players, monitoring their performance, and "screening" potential candidates. New media tools would allow travel budgets to be cut and would widen the breadth and scope of scouting, both quantitatively and geographically.

However, new media tools do not necessarily change how scouts perceive new talent; instead, they allow players to be seen from different perspectives and found through additional online channels. This is a sort of "reverse" process where players can show off their skills before that scouts physically observe them on the field. For young athletes, indeed, social media can be a means of self-representation, allowing them to get recruited and start connections with a potential audience of coaches and scouts.

Moreover, the use of multimedia platforms as an additional recruiting channel might offer new avenues of brand exposure and visibility for other stakeholders involved within the contemporary sports industry, such as sponsors, suppliers, distributors, and TV networks. New media and social media might also open up opportunities for engaging fan bases that could encourage or discourage players through the online channels. Their attachment might increase their brand loyalty towards clubs.

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[18] Interview with Giovanni Ferraro, FIFA Players' Agent, November 26, 2014.

Despite the obvious value that sophisticated digital and multimedia technologies provide for scouts, they have not progressed as far as they could in the sport of football. Especially within the Italian context, a "stubborn school of thought that resists the use of all new technologies remains"[19]. Information still comes in the form of expertise and experience acquired only via a lifetime of playing and coaching the game. It is still very common to call up local scouts and ask them for player recommendations.
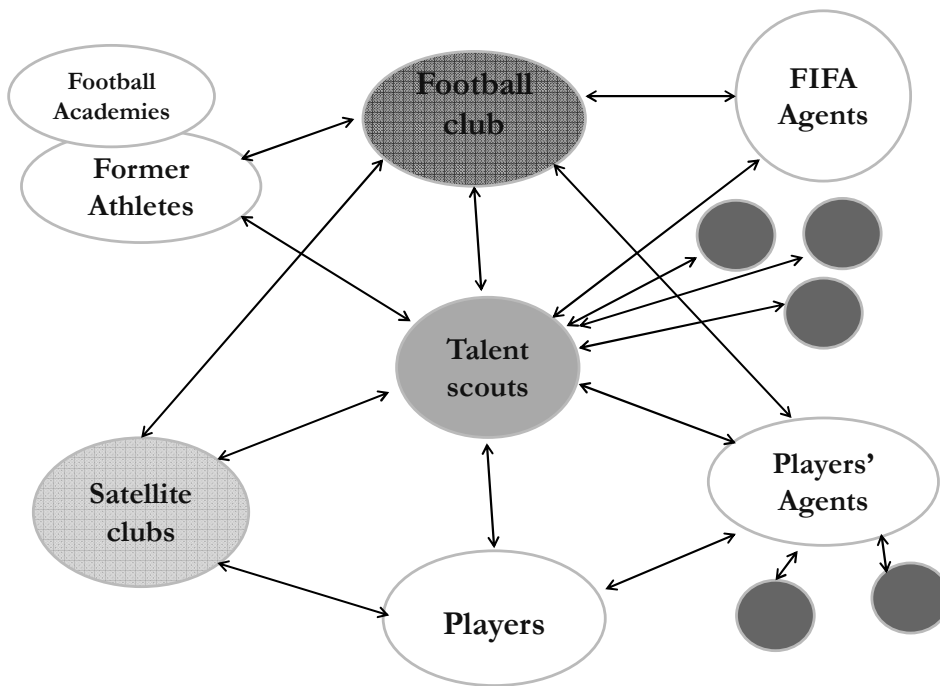

Figure 5. The football players' sourcing network
Source: own study.

Resistance to change seems to still be firmly ingrained within the context of Italian football. Considering the evidence that can be derived from our qualitative investigation based on unstructured discussions with professionals in this field, it can be said that one of the main constraints in Italy may be the older median age of people involved in the talent scouting process that underlies the mismatch between the supply side of the sport (clubs) and the demand side (athletes): on one hand, young players are skilled in social media and are looking for new channels of visibility, especially if they come from a remote geographical area and/ or minor football division; on the other hand, many senior football professionals are not very confident with new technologies and have yet to realize the benefits of using social media to recruit athletes.

Football clubs still need to develop managerial skills and learn how to deal with new technologies to improve the decision-making process and strategic value of talent scouting. Nevertheless, despite the increasing relevance of new media in the sports industry, it should not be a "solo" voice. Digital and multimedia tools for talent recruiting will most likely never replace traditional scouting in full, though they may become an innovative and "supplemental" source for the player evaluation process. While it may be necessary to develop new capabilities for the supply chain management of the sport, it may also be necessary to develop a complementary mix of managerial and statistical skills to be used alongside the skills of people who are highly experienced in the game itself.

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[19] Interview with Davide Mercurio, Junior Scout at Modena FC, December 10, 2014.

Since the research undertaken for this study was based on a qualitative approach, the results cannot be generalized. Moreover, our observations, derived from an analysis of the football talent social network FB Player, are mainly referred to as the demand side, i.e., athletes and their use of new media platforms. Therefore, a future study could devise an extended exploration of the Italian Serie A, Serie B, and Lega Pro teams in order to provide an understanding of the main motivations and/ or constraints of coaches and scouts in using new media and social media for talent recruiting. The results might offer professional football teams and governing bodies like federations and leagues new insights about opportunities for detecting young players using digital technologies. Then, specific training courses for scouts and coaches could be implemented in order to diffuse specific knowledge of and capabilities for using new media at different levels of the player supply chain.

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AUTHOR'S ADDRESS: Elena Radicchi
Sports Management Lab
University of Florence
Viale Morgagni 63
50134 Florence, Italy
E-mail: e.radicchi@unifi.it