

Positive impact technology has in soccer



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The Positive Impact Technology has in Soccer and how it Helps to Eliminate Corruption in the Organizations

Abstract

This research work is about the technology in soccer. We will see how it integrates into different areas of soccer from the preparation of players, the decision making of refs, to the view from a fan perspective. It will also contribute to the elimination of corruption within the sport. Our experiment compared games with and without technology as well as interviews with referees and players. The results showed a lower percentage of errors during a match and a higher satisfaction from everyone involved. The conclusion is that, with the inclusion of technology we can guarantee fairness in a match, eliminating the accusations of corruption. We can also conclude that technology has made sports more competitive enhancing the spectacle.

Introduction

What would happen if during a game your favorite team scores a goal and the referee does not count it, because the player was supposedly offside? Or because the ball entered the goal but the goalkeeper took it out before the referee noticed it? Or maybe because someone paid the referee not to count it? We can avoid all these injustices by using technology to help the referees to perform a better job, and to end the corruption that FIFA has been involved recently. A recent study shows that “ For accuracy of all potential offside situations, according to a new definition (with the attacker 2 m in front or behind the second-last defender), the error percentage was 7. 6% (17 flag errors and 9 non-flag errors out of 342 situations)” (Catteeuw, 2010,

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p. 1030). This topic will be very pleasing to all those people who have an interest in soccer, or any team sport. This research will deal with various issues related to the technology applied in soccer. We will see how technology helps soccer, from players, referees and fans themselves. In the player area, we will implement it in their physical preparation as technology helps them maintain or improve their physical condition and excellent health. In the case of referees, we will focus on how technology allows them to have a communication at a distance with the other referees to know if the ball goes over the goal line and to support the decision-making. The other benefit we will explore is presented by means of video, allowing fans and referees to review plays and ensuring fairness in all stages of the game.

Technology advances.

Sports biomechanics, analyze sports practice to improve their performance, develop training techniques and design accessories, materials and high performance equipment. The overall goal of sports biomechanics research is to develop a detailed understanding of specific mechanical sports and their performance variables to improve performance and reduce the incidence of injuries. This translates into the investigation of specific sports techniques, better designing the sports team, clothing, and identifying practices that predispose to an injury. Given the increasing complexity of training and performance at all levels of competitive sport, it is not surprising that athletes and coaches are turning to the biomechanical research literature aspects of their sport for a competitive advantage. Thanks to Lees (2010) “the focus of this review is biomechanical in nature and builds on and extends previous reviews and overviews”.

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A scientific specialty that applies methods for measuring the size, shape, proportions, composition, maturation and gross function of the body structure. It is considered a basic discipline for the solution of problems related to growth, development, exercise, nutrition, and performance, which constitutes a quantitative link between structure and function, or an interface between anatomy and physiology or performance. Described the morphological structure of the individual (whether this athlete is competitive or recreational) in its longitudinal development, and the changes caused by growth and training. It offers the player a complete scientific study of their physical performance.

Weight, height and skin folds are measured to obtain the percentage of fat. The muscle perimeters are calculated to know the muscle mass. Even bone diameters are also the object of study. With these data, the player are evaluated to see if he is having an adequate growth for his age and if he gets too tired, since weight loss is a symptom of fatigue. These data is compared with the rest of the group and the educator is oriented to obtain the maximum performance of the player.

Applying it to soccer, we can get a better understanding of the biomechanical parameters of the player, through a quantitative and qualitative assessment of the player's movements. This allows assessing the individual technique of the player and compare it with other elite athletes. This science focuses on the kinematics and dynamics of the sports movement, that is, the description and explanation of this movement through biomechanical systems. The process is simple: the movement to be analyzed is recorded in video, and then digitized; this data is transfer into a <https://assignbuster.com/positive-impact-technology-has-in-soccer/>

computer program that performs a three-dimensional calculation.

Subsequently, a biomechanical calculation allows obtaining data of angulation, speed, force, power or supports.

Tito and Severgnini (2011) had previously examined this subject “ Episodes uncovered were connected with two of the largest match-fixing scandals in Europe involving criminal organizations, soccer players, team managers, and referees. These investigations, also known as Calciopoli and Scommessopoli, offer unique case studies to understand the mechanisms behind match-fixing in professional football and opportunities to fix it” (p. 355). VAR is a system of video review that referees can use to analyze match-changing situations such as goals, penalties, and red cards. If there is a debatable incident, the referee on the field is notified by a team of off-field officials watching the game from a video control room. The on-field referee then has the option to stop the game to watch a replay on the sideline. If the referee chooses to review the play, he can overturn or confirm his original decision. With this technique with can guarantee fairness in all stages of the match.

Video recording allows you to record a whole workout to be able to analyze it later. This tool of work is used often, as educators realize that, it is very difficult to appreciate everything that happens in the field. After carefully viewing the images, the appropriate conclusions are obtained. Another usefulness of video recording is the self-assessment that players can do when they see themselves performing a specific exercise. It is an important correction tool for any educator, not only in games but also in training. The good use of this technique is very motivating for the player, since he realizes where the error is and how to correct it. It also has the advantage that you

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can watch it repeatedly, in slow motion and even freeze the image when necessary.

Catteeuw et al. (2009) found “ Two hypotheses for explaining incorrect decisions were investigated, namely, the flash-lag effect and the shift of gaze. Performance differences between skill levels were also examined. First, results showed a bias toward flag errors for national ARs as expected by the flash-lag effect. Second, ARs fixated the offside line before, during, and after the precise moment the pass was given, implying there was no shift of gaze from the passer to the receiving attacker. Third, no differences were found in scan patterns between international and national ARs” (p. 787). Arbitral Intercom System allows the audio conference between the referee team, has a range of more than one kilometer, is light and easy to use. In addition to the technology used, it allows to isolate the voice, avoiding the introduction of external noises, such as the crowd and even the whistle of the referee. It uses an encrypted frequency system, which prevents communication from being interrupted or from having the signal intervened and is the same as that used in the UEFA Cup, Champions League, Premiership, First and Second Division of France; and it was the one that was used in the World Cup.

The Electronic Flags system supports the assistant referee to get the attention of the referee by sending a signal via radio, which directly affects a receiver that the central referee carries on the arm. The Flag (Transmitter) is integrated into the flag handle of the assistant referees and sends an encrypted signal to the referee's receiver. The receiver is mounted in a small black box carried by the referee, tied with a strap on the upper arm. The

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signal transmitted by the assistant is by means of vibration, in addition to emitting sound. To prevent interruption or disturbance due to other sources of transmission, a complex coding system is used. The Swiss referees have tested the system since the beginning of 2004 during the Swiss national competition, the international events of the Euro Cup, the European championship of the UEFA in England and the Olympic Games, in all with very satisfactory results.

The Goal line technology, which contains an integrated 1.5 cm electronic circuit, sends a radio signal when it crosses the line that delimits the football field. This signal is transmitted by a system of 12 antennas that are located in the corners of the football field. The signal reaches a computer that, in less than a second, sends a message to a wristwatch worn by the referee. International Federation of Football Associations (FIFA), Sepp Blatter that outlined eight reasons why GLT should not be used in football. The reasons given by FIFA can be broadly separated into three categories; those dealing with the nature and value of the game of football, those related to issues of justice, and those concerned with the practical implementation of GLT (Ryall, 2012, p. 443).

Method

Participants in this study included 15 referees, 20 professional players, and 5 elite managers. Participants were all male between the ages of 19 and 54. All participants in this study were volunteers.

We are going to develop a survey that will focus on a series of questions intended for players, referees and managers, about the different

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technologies being use in the field. we are going to analyze the data from each batch of subjects to determine if technology in soccer is improving the game or deteriorating it, and what could be done to improve the sport.

We will use the past world cup where technology advances were included to determine if this advances had help the referees in the decision making.

The objective is to evaluate the amount of mistakes that are being prevented in a match, to find out if the inclusion of technology is helping the decision-making, or in the contrary is taking away from the show.

We will be also conducting interviews with qualify specialist on their point of view about the VAR (video assistant referee).

Information about the study, purpose, and privacy were part of the consent form.

Results

According to the survey 15/15 of the referees, 18/20 players, and 4/5 managers agreed on technology improving the game, but also agreed that technology needs to become faster, Sometimes the game stops for over a minute, this means that the players and fans have to wait this time for the game to resume and pray for the time to be added at the end of the match. This disrupts the rhythm of the game and destroys the nature of soccer.

VAR is soccer's first attempt at using video technology to aid refereeing decisions at a World Cup. During the World Cup 455 moves were reviewed, of which there was a 95.6% arbitration success, changing the decision on 17

moves. 9 penalties were awarded thanks to the VAR and the identity of a player was detected after a play that ended in expulsion.

Here are some of the comment that we got from the interviews about the VAR in soccer:

The Spanish coach left with this appearance of video arbitration. “ I really liked the introduction of the VAR, the possibility of re-arbitrating the plays is one of the best things that has happened, speaking about football, I am left with equality without any doubt”, says the highest Spanish technical manager.

Maradona, Argentina’s former playmaker, supports VAR: “ Technology brings transparency and quality and it provides a positive outcome for teams who decide to attack and take risks.”

Former referee Gianluca Colina who was accused of corruption 10 years ago but found innocent, said: “ if technology would’ve been around 10 years ago, the corruption scandals wouldn’t exist, because technology does not only help us do our job, it helps soccer guarantee absolute fair play.”

Conclusion

In carrying out the research we have seen how technology is implemented in different areas of football, it should be mentioned that the implementation of technology in different areas of football have been very beneficial because we see that referees can be assured when making their decisions. With the implementation of technology in soccer that does not take us by surprise

that we could soon look at things of even better quality to carry out the practice of this

We are in the times of greatest technological revolution in our history, advancing at a very fast pace that is constantly accelerating. But we have to consider that these new technologies that are appearing must be appreciated with the utmost respect, since they have facilitated and improved our lives.

Now that a thorough and exhaustive analysis of the research has been carried out, we have managed to conclude the following, it has been possible to achieve a greater degree of precision and equity in the refereeing, allowing a greater approach of the public and the spectator in general. On the other hand, the technological possibilities appear endless and this is due in large part to the constant updating of said devices.

The technology has been gradually influencing the sport, for its improvement, in terms of precision, efficiency, performance, etc. This has allowed a greater accuracy in goal scoring.

Taking into account that despite all these technological advances that have been coming and will continue to come with the passage of time, we can not afford to lose the essence of sport.

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