### Journal of Advanced Sport Technology

DOI: 10.22098/jast.2025.3613

Received: 2023 October 16 Accepted: 2025 January 1

#### ORIGINAL ARTICLE

# Recognition of the juridical challenges of technological progression in the sport industry (through presenting a solution)

Vahid Shojaei<sup>\*1</sup>, Zahra Habibi Kelachaye<sup>2</sup>, Pedram Barari Bijargah<sup>3</sup>, Fateme Adib Chomachaee<sup>4</sup>

1. Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

2. PhD Candidate, Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

3. PhD Candidate, Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

4. PhD Candidate, Department of Sport Management, Sari Branch, Islamic Azad University, Sari, Iran

Correspondence	ABSTRACT i			
Author's Name: Vahid Shojaei				
Email: <u>shojaei.vahid@yahoo.com</u>	<b>Background</b> : The sports industry faces a multitude of challenges due to technological advancements, and without appropriate solutions, many issues may arise. This study aims			
	to identify optimal policies to safeguard the rights and interests of all stakeholders in the sports industry and to achieve a balance between technological advancements and athletes'			
	rights.			
	Methods: This research is practical in nature and was conducted using a qualitative method			
	through a descriptive phenomenological approach. Participants included university faculty members from the Sport Management Department, legislators, sports law experts, senior			
	managers from the Ministry of Sports and Youth, coaches, and athletes in 2023. Purposeful			
	sampling was employed to select participants. Data were collected via semi-structured			
	interviews with open-ended questions, and validity and reliability criteria were applied to			
	ensure the study's rigor.			
	<b>Results:</b> According to the data obtained from expert interviews, the challenges and legal			
	solutions associated with technological advancements in the sports industry can be			
	categorized into 54 sub-contents within six main areas: athletes' privacy, athletes' injuries,			
	ethical conflicts, referee issues, intellectual property, and live broadcasting.			
	Conclusions: Addressing the challenges arising from technological advancements in the			
	sports industry is crucial for maximizing the potential of athletes and coaches. Additionally,			
	maintaining justice and moral values in sports is essential as new technologies develop,			
	ensuring that technology is used fairly and equitably in sports. To uphold these values,			
How to cite Shojaei, V., Habibi Kelachaye, Z.,				
Barari Bijargah, P., & Adib	KEYWORDS			
Chomachaee, F. Recognition of				
the juridical challenges of technological progression in the	Juridical challenges, Privacy, Sport, Solution, Technology.			
sport industry (through presenting a solution). Journal of Advanced				
Sport Technology, (2025); 8(4), 55- 64.	https://jast.uma.ac.ir/			
DOI: 10.22098/jast.2025.3613				

55



Open Access

#### Introduction

In today's innovative world, all sciences have experienced significant advancements, and the sports industry, driven by competitiveness and the inherent need for technology and innovative management during competitions, is increasingly embracing new technologies and applied developments in sports [1]. Over time, there have been substantial changes in the global sports industry, with various sports evolving beyond their traditional forms over the past two decades, adopting technological tools to mechanize and enhance the performance and overall efficiency of sports activities [2].

The use of technology in sports effectively improves the performance of athletes and competitors, fostering the development of sports and creating new business opportunities for the growth and advancement of the sports sector [3]. In the current era, humans interact with computers to introduce new methods and forms for applying technology in sports environments, enhancing quality [4].

Over time, there have been extensive promotions in the global sports industry, and in the last two decades, various sports have transitioned from their traditional forms to novel configurations through technological tools, mechanizing and improving the overall performance and efficiency of sports activities [5] Sport and exercise science, like many other fields, has been significantly influenced by technological advancements [6]. The use of technology in sports is instrumental in enhancing the performance of athletes and competitors, expanding sports, and creating new business opportunities for the advancement and development of sports [7].

In the last decade, the emerging and increasing development of technology in the sports industry, particularly in the event industry, has grown significantly. Despite human factors' nonconformity, technology has penetrated various areas of this lucrative industry, consequently influencing all sectors related to event management [8]. Sport and exercise science, like most aspects of life, has been profoundly affected by technological advancements. Technology plays a crucial role in the education sector as a supporter of the learning process, as the use of technology is essential for information sharing and communication [9].

For instance, some factors that pose challenges in applying sports industry technologies include managerial factors, economic factors, infrastructural factors, organizational factors, media factors, and social factors [10]. Physical education and sports are no exception. In modern conditions, innovative technologies help improve physical results, create comfort in sports, and enhance the effectiveness of physical exercises [11]. It is recommended that those managing, handling, and using sports must be equipped to make wise choices regarding the type and use of sports technologies that would assist in optimal performance. Therefore, innovative technologies are an integral part of any human activity [12].

Surveying the increasing use of technology in the sports industry demonstrates that establishing various sports technologies as multilateral tools has been effective in minimizing the challenges in organizing sports competitions by enhancing cognitive skills and reducing incorrect and impractical decisions [13]. Consequently, due to the rapid advancement of technologies and their widespread use in the sports industry, more complex interactions have arisen regarding the rights and laws associated with sports [14]. As technology continues to transform various aspects of sports, it brings forth a range of legal implications that must be addressed to ensure fairness, safeguard athletes' rights, and maintain the integrity of the games [15].

One of the primary legal challenges presented by technological advancements in the sports industry pertains to the use of data analytics and player performance tracking. Advanced technologies, such as artificial intelligence, machine learning, and big data analytics, are increasingly employed to analyze player performance, optimize training strategies, and make strategic decisions [16]. However, concerns arise regarding privacy, data protection, and ownership rights when it comes to collecting and utilizing personal data. It is crucial to establish clear guidelines and regulations that strike a balance between the benefits of data-driven insights and the protection of athletes' privacy and rights. Additionally, the emergence of e-sports and virtual sports presents novel legal challenges. Intellectual property rights, including copyrights and trademarks, must be carefully safeguarded in the virtual realm. Regulations should be established to govern ownership, licensing, and broadcasting rights in the rapidly expanding e-sports industry [17]. Moreover, robust legal frameworks are essential to combat cybercrime, cheating, and match-fixing in e-sports, preserving the integrity of competitions and protecting the interests of athletes, sponsors, and fans [18].

In conclusion, the legal challenges associated with technological advancements in the sports industry require proactive measures to ensure fairness, protect athletes' rights, and preserve the integrity of the games. By establishing clear regulations, promoting education, and fostering collaboration, we can overcome these challenges and harness the benefits of technology while upholding the fundamental principles of the sports industry. Furthermore, research allows us to anticipate and proactively address potential legal challenges that may emerge as technology continues to evolve. By staying ahead of the curve, researchers can identify emerging technologies and their potential implications on the sports industry. This forward-thinking approach enables the development of proactive legal frameworks, guidelines, and policies that can effectively govern the use of new technologies and prevent legal complications before they arise. Research on the juridical challenges of technological progression in the sports industry is generally considered significant, as it helps to identify the best solutions and policies to protect the rights and interests of all stakeholders in the sports industry and to provide a proportionate balance between technology and the rights of athletes. Surveying the juridical challenges of technological enhancement in the sports industry allows us to recognize the latest legal challenges in this field as well, playing a crucial role in adjusting new laws and regulations or amending existing ones. In this regard, the current research aims to identify the juridical challenges of technological progression in the sports industry and seeks to answer the question: 'What are the juridical challenges of technological progression in the sports industry and what solutions should be implemented to address them?'

#### **Material and Methods**

The current research is practical in terms of its purpose and was conducted using a qualitative method through a descriptive phenomenological approach. The aim was to identify the legal challenges of technological advancement in the sports industry by providing practical solutions. For this reason, the phenomenological method was utilized, and for the purpose of analyzing the interview data, the Collaizi method (1978) was employed.

Participants in this study included university faculty members from the sports management department, law, sports law, senior managers from the Ministry of Sports and Youth, coaches, and athletes, formed in 2023. The sampling method was purposeful. The data collection tool was a semi-structured interview with open questions. The duration of the interviews ranged from 30 to 45 minutes. Interviews continued until completely non-repetitive concepts could be extracted (21 interviews).

Finally, all interviews were listened to several times, the resulting content was transcribed verbatim, and the coding process was conducted using MAXQDA version 20 software. To finalize the research,

validity and reliability criteria were applied. After analyzing the interviews, they were shared with the interviewees, and their feedback was incorporated, with necessary corrections made.

Reliability refers to the stability of data over time and under different conditions. To check reliability, the intra-subject agreement method of two coders was used. Two expert coders, familiar with the coding method and the topic related to the present study, coded the interviews, and the percentage of agreement between the two coders was 85%.

#### Results

Based on the information gained through interviewing with research experts, the challenges and juridical solutions of technological progression in the sport industry include 54 sub-contents in the form of 6 main contents: athletes' privacy, athletes' injuries, ethical conflicts, referee problems, intellectual property and live-broadcasting. The findings obtained from the information of the participants in the study are presented in Table 1.

Main content	Sub-content
Challenges pertaining to athletes' privacy	1.Gathering athletes' physiological information athletes
	2.Gathering athletes' motor skills data
	3.Gathering athletes' personal information
	4. Analysis of the athletes' behavior
	5. Conflicts relating to privacy protection regulations
	6.Misuse of the athletes' information and data
Solutions pertaining to the privacy of the athletes	7. Establishing privacy rules and regulations by sport organizations
	8.Specifying the type and manner of gathering athletes' information
	9.Specifying how to use the athletes' obtained information
	10.Specifying how to preserve the athletes' obtained information
	11.Athletes' consent in connection with collecting personal information
	12.Notifying and training athletes regarding the protection of personal information
	13. Continuous examination and security assessments of the athletes' information
Challenges pertaining	14.Increasing pressure and stress on athletes by using wearable devices, sensors and
to the athletes' injuries	tracking equipment
	15. Possible misdiagnosis of biometric data and performance analysis
Solutions pertaining to the athletes' injuries	16.Proper training and accurate use of novel equipment and technologies
	17. Checking the health and safety of new devices
	18.Matching the settings and standards of technologies with the technical regulations
	of sports
	19. Assigning the limits of using new technologies such as: time of use, body pressure
	20.Using algorithms and correct data interpretation methods
	21.Using athletes' feedback about the experience of injury with new equipment
Challenges pertaining to ethical conflicts	22.Lack of competitive balance and fairness in accessing new sport equipment
	among athletes
	23.Increasing inequality in sport competitions with the use of prohibited items
	24.Creating a feeling of insecurity in the athlete
	25.Impact on the athletes' health
Solutions pertaining to	26.Enhancing rules and regulations upon the use of technology in sports
ethical conflicts	27.Observing ethical principals in improving athletes' performance with the use of
	technology in sports
	28.Appropriate monitoring of athletes' ethical abuse of new technologies in sports
	29.Frequent stops during the game
Challenges pertaining	30. The possibility of human error in referee decisions with new technologies
to referee problems	31.Reducing the role of referees during the competition

Table 1. Juridical challenges of technology progression in the sport industry via providing a solution

ing
ing
ng
ing
ng
ing
ing
ing
C
gies in
-
rty
•
ents

#### Discussion

The progression of technology in sports considerably enhances the sporting experience and significantly impacts performance and results. However, these advancements also bring about juridical challenges. Protecting intellectual property rights, maintaining privacy and data security, and addressing juridical conflicts in the application of technology in competitions are among the main legal challenges. To confront these challenges, it is essential to develop laws and regulations that protect intellectual property rights, ensure privacy, and establish practical guidelines for the use of technology in sports. These actions can effectively protect interests in the sports industry and promote justice and authenticity in sports competitions. In this regard, the current study aims to identify the juridical challenges of technological progression in the sports industry and provide essential solutions to address these problems. The first content identified in the section on juridical challenges is the privacy of athletes. With technological advancements in sports, athletes' privacy can be endangered by various factors. Gathering and using personal data is one of the principal concerns in this field. In the era of wearable devices, smart equipment, and tracking systems, athletes' personal information, such as biometric data, training routines, and performance statistics, can be recorded and stored. Improper use or unauthorized access to this data can lead to privacy risks and potential exploitation. To address concerns related to privacy violations, it is crucial to create policies, develop acceptable regulations, and establish guidelines regarding the collection, storage, and use of athletes' personal information. The mechanisms for obtaining athletes' consent in applying new sports technologies should be transparent to ensure that athletes have control over the sharing and dissemination of their personal information.

Education and awareness mechanisms also play an indispensable role in informing athletes about potential risks and best practices to protect their privacy in the digital age. Furthermore, sports organizations and related entities should collaborate with technology providers and cybersecurity

experts to implement secure data management systems and platforms. Secure privacy technologies and encryption techniques can be employed to safeguard athletes' personal information and prevent unauthorized access.

The second content found in the juridical challenges section of technological progression in the sport industry is the athletes' injuries. Normally, the technology progression in the sport industry can lead to physical and mental injuries of the athletes. The injuries happen due to the extensive use of advanced equipment and technologies in sport training and competitions. As an example, the use of electronic equipment such as sensors and tracking devices place much pressure on the athletes' bodies during training and competitions. This issue may lead to the muscle and joint injuries, or can decrease the performance of the athletes. The widespread use of cameras in recording and analyzing athletes' performance may also increase mental pressure and stress, and accordingly affects the athletes' performance and self-esteem. Some of the solutions identified in this part include: proper training and well-advised use of new equipment and technologies, determining the limits of new technologies use, and taking use of athletes' feedback about experiencing injuries with new equipment.

Ethical conflicts are the third content recognized in the realm of juridical challenges of technology progression in the sport industry. Fundamentally, the progression of technology in the sport industry, competitive balance and augmenting inequality can results in a consequential challenge. Athletes who do not have the ability to access advanced sport technologies, enjoy less progression in enhancing their performance and personal development as compared to their competitors who have access to the mentioned technologies. This object will eventually increase inequality in sport fields. Therewith, clubs with more financial resources have more accessibility to the advanced technologies and buy better training programs and equipment as well. Hence, actions should be taken to create a balance in accessing to technology in a way that all the athletes can benefit. The solutions noticed in this section entail: developing the rules and regulations regarding the use of technology in sports, compliance with ethics in improving athletes' performance via applying technology in sports, and suitable monitoring of athletes' ethical abuse of new technologies in sports.

The fourth content recognized in the area of juridical challenges of technological progression in the sport industry is the subject connected to the sport competitions refereeing. Despite the fact that applying novel technologies in the refereeing of sport competitions contributes largely in the accuracy and precision of referees' decisions, human errors are inevitable. Interpreting information and images is upon human referees, which may cause mistakes and errors that cannot be thoroughly covered even with the use of modern technologies. The use of sport technologies in judging competitions may also bring about frequent stops in the course of the match. The reason relates to the extended investigations and detailed decisions by the referees, which decreases the excitement of the competitions, and ultimately will result in dissatisfaction of the players, coaches and spectators. Implementing advanced sport systems and technologies is costly. Some technologies and devices are very pricey and require remarkable investment. This issue creates many challenges for sport leagues and organizations that are confronting limited financial resources.

Sports refereeing technologies occasionally face technical problems. Delays in device performance and errors in interpreting data may bring problems for referees of sport events and ultimately cause lack of trust in technology-based refereeing. Working with these devices also has its own complexities, which requires continuous research and development, cooperation between sport organizations and technology suppliers, regular training and preparing referees and evaluators in order to reach the essential certainty and clarity to comprehend the importance of applying technologies in judging sport competitions.

Intellectual property issue is the next identified content relating to the juridical challenges of technological progression in the sport industry. With the technology advancement in sport areas, issues related to the intellectual property of inventors and the commercial use of brands have become more prominent. Inventors in sport domains can present new inventions and innovations that results in progression and innovation of the sport industry. Thence, protecting intellectual property rights is critically important for inventors. With the growth of technology, brands have also become more considerable in the sport domains. Accurate commercial use of the brand and being recognized in the market can help companies and clubs gain a competitive advantage. However, with technology progression, the risk of infringement of intellectual property rights has increased. For instance, unauthorized imitation of inventions, illegitimate use of brand names and logos and exact imitation of technologies lead to the violation of the intellectual property rights of the inventors and brand owners. Under these circumstances, legal actions can be taken such as complaining, publishing warnings and concluding contracts necessary to protect intellectual property rights.

Live-broadcasting and the issues thereof are the last content in relation to the juridical challenges of technological progression in the sport industry. Basically, the advancement of technology in the field of sports, especially in the field of live-broadcasting, has had a significant impact. In essence, the progression of technology in sport domains, especially in the field of live broadcasting, has had a significant impact. Nowadays, people can watch live sport matches and enjoy diversified sport contents through the Internet and online sport platforms. However, the existence of a series of legal conflicts between online platforms and television channels, the possibility of concluding exclusive contracts, and alterations in consuming patterns of watching sport competitions have brought forth challenges. The solutions that were noticed in this section include: negotiations and fair distribution of media broadcasting rights, ascertaining market development strategies such as: creating exclusive contents, using encrypting technologies and digital rights management.

#### Conclusion

To sum up the contents, taking into account the challenges that have emerged with the progression of technology in the sport industry is extremely crucial; as it causes full and optimal use of the capacity both of the athletes and the coaches. Additionally, with the growth of new technologies, it seems necessary to pay attention to maintaining justice and moral values governing sports; since it leads to the optimal and equal use of technology in sports by athletes. Therefore, the contents of this research should be used by the relevant managers to maintain the stated values.

#### **Ethical Considerations:**

#### Compliance with ethical guidelines

All ethical issues have been observed in the research. **Funding** Authors state no funding involved.

#### **Conflict of Interest**

The authors declare that there are no conflicts of interest regarding the publication of this manuscript.

#### Acknowledgment

The authors thank all those who helped in conducting this research. None of the authors declare any conflicts of interest.

#### References

- 1. WICKER, Pamela; BREUER, Christoph. Exploring the organizational capacity and organizational problems of disability sport clubs in Germany using matched pairs analysis. *Sport management review*, 2014, 17.1: 23-34. <u>https://doi.org/10.1016/j.smr.2013.03.005</u>
- MASON, Daniel S.; THIBAULT, Lucie; MISENER, Laura. An agency theory perspective on corruption in sport: The case of the International Olympic Committee. *Journal of sport management*, 2006, 20.1: 52-73. <u>https://doi.org/10.1123/jsm.20.1.52</u>
- 3. ŠTULAJTER, Ivan, et al. A Comparative Analysis of Sports Policies in the Nordic Countries. *Politické* vedy, 2022, 25.2: 34-53. <u>https://www.ceeol.com/search/article-detail?id=1049228</u>
- 4. Ratten V. Sport technology: A commentary. The Journal of High Technology Management Research. 2020; 31(1): 100383. <u>https://doi.org/10.1016/j.hitech.2020.100383Get rights and content</u>
- Ugondo P, Tsokwa M. Interpreting video assistant referee and goal-line technology communication: the pitch-based referees perspectives. International Journal of Trend in Scientific Research and Development. 2019; 3(4): 1058-1062. <u>https://scholar.google.com/scholar?hl=en&as\_sdt=0%252C5&q</u>
- 6. MALI, Narendra Prosad; DEY, S. K. Modern technology and sports performance: An overview. *International Journal of Physiology*, 2020, 5.1: 212-216.

https://scholar.google.com/scholar?hl=en&as\_sdt=0%2C5&q=6.%09MALI%2C+Narendra+Prosad%3B+D EY%2C+S.+K.+Modern+technology+and+sports+performance%3A+An+overview.+International+Journal+ of+Physiology%2C+2020%2C+5.1%3A+212-216.&btnG=

- LAFERRIER, Justin Z., et al. Technology to improve sports performance in wheelchair sports. Sports Technology, 2012, 5.1-2: 4-19. <u>https://doi.org/10.1080/19346182.2012.663531</u>
- Spitz, J., Wagemans, J., Memmert, D., Williams, A. M., & Helsen, W. F. (2021). Video assistant referees (VAR): The impact of technology on decision making in association football referees. *Journal of Sports Sciences*, 39(2), 147-153. <u>https://doi.org/10.1080/02640414.2020.1809163</u>
- FIRMANSYAH, Guntur, et al. THE IMPORTANCE OF MULTIMEDIA TECHNOLOGY IN PE LEARNING. 2021. FIRMANSYAH, Guntur, et al. THE IMPORTANCE OF MULTIMEDIA TECHNOLOGY IN PE LEARNING. 2021. <u>https://doi.org/ 10.2991/assehr.k.211125.034</u>
- Ghezelsefloo, H., Alavi, S. The Impact of event-based sports technologies on the training and career development of referees in Iran volleyball super league. *Technology of Education Journal (TEJ)*, 2022; 16(2): 351-362. <u>https://doi.org/10.22061/tej.2022.8133.2622</u>
- 11. BOLTAYEVICH, Ahmedjanov Shuhrat; MAMUR, Bahrullayev. THE IMPORTANCE OF MODERN TECHNOLOGIES IN THE DEVELOPMENT OF PUBLIC SPORTS AND PHYSICAL EDUCATION LESSONS. *Galaxy International Interdisciplinary Research Journal*, 2023, 11.3: 284-287. https://scholar.google.com/scholar?hl=en&as\_sdt=0%252C5&q=11
- OMOREGIE, Philip Osamende. The impact of technology on sport performance. In: Proceedings of INCEDI 2016 Conference 29th31st August. 2016. <u>https://www.researchgate.net/profile/Philip-Omoregie/publication/333808384</u>
- ABANDANSARI, Mohammad Zare; MOHARRAMZADEH, Mehrdad; REZAPOUR, Fatemeh. Qualitative Analysis of Factors Relating to the Application of VAR Technology in the Development of Iran Football Premier League Competitions. *Journal of Advanced Sport Technology*, 2021, 5.1: 89-104. <u>10.22098/jast.2021.1233</u>

- GLEBOVA, Ekaterina; GERKE, Anna; BOOK, Robert. The transformational role of technology in sports events. In: Sports Management in an Uncertain Environment. Singapore: Springer Nature Singapore, 2023. p. 169-187. <u>https://doi.org/10.1007/978-981-19-7010-8\_8</u>
- 15. STUDNICKA, Anthony. The emergence of wearable technology and the legal implications for athletes, teams, leagues and other sports organizations across amateur and professional athletics. *DePaul J. Sports L.*, 2020, 16: i. <a href="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=&page="https://heinonline.org/HOL/LandingPage?handle=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16&div=11&id=hein.journals/jspocpd16
- 16. GALE, Kristy. Evolving sports technology makes its mark on the Internet of Things: Legal implications and solutions for collecting, utilizing, and disseminating athlete biometric data collected via wearable technology. *Ariz. St. U. Sports & Ent. LJ*, 2015, 5: 337. <u>https://heinonline.org/HOL/LandingPage?handle=hein.journals/selj5&div=18&id=&page</u>=
- 17. BOZKURT-YÜKSEL, Armağan Ebru. INTELLECTUAL PROPERTY RIGHTS of GAMERS in ESPORTS. *Law* & *Justice Review*, 2021, 11.21. https://openurl.ebsco.com/EPDB%3Agcd%3A3%3A22382883/detailv2?sid=ebsco%3Aplink%3Aschola r&id=ebsco%3Agcd%3A148669379&crl=c&link\_origin=scholar.google.com
- YUN, Sok Min. A comparative overview of esports against traditional sports focused in the legal realm of monetary exploitation, cheating, and gambling. *Cardozo Arts & Ent. LJ*, 2019, 37: 513. <u>https://heinonline.org/HOL/LandingPage?handle=hein.journals/caelj37&div=21&id=&page</u>

DOI: 10.22098/jast.2025.3613

تاریخ دریافت: ۱۴۰۲/۷/۲۴

تاریخ پذیرش: ۱۴۰۳/۱۰/۱۲



«مقاله پژوهشی»

## شناسایی چالشهای حقوقی پیشرفت فناوری در صنعت ورزش (با ارائه راهکار)

وحید شجاعی' \* 🛑، زهرا حبیبی کلاچایه ٔ ២، پدرام براری بیجار گاه ២، فاطمه ادیب چماچایی ٔ ២

- ۱- دانشیار، گروه مدیریت ورزشی، واحد ساری، دانشگاه آزاد اسلامی، ساری، ایران
- ۲- دانشجوی دکتری، گروه مدیریت ورزشی، واحد ساری، دانشگاه آزاد اسلامی، ساری، ایران
- ۳- دانشجوی دکتری، گروه مدیریت ورزشی، واحد ساری، دانشگاه آزاد اسلامی، ساری، ایران
- ۴- دانشجوی دکتری، گروه مدیریت ورزشی، واحد ساری، دانشگاه آزاد اسلامی، ساری، ایران

چکیدہ	
<b>هدف:</b> چالشهای پیشرفت فناوری در صنعت ورزش به شکلهای مختلفی وجود دارد که اگر راهکارهای مناسبی	نويسنده مسئول
برای آن اندیشیده نشود؛ مشکلات بسیاری را در این زمینه ایجاد خواهد کرد. درهمینراستا پژوهش حاضر با این	نام نویسنده: وحید شجاعی
رویکرد انجام شد تا بهترین سیاست.ها را برای حفاظت از حقوق و منافع تمامی عوامل مرتبط با صنعت ورزش	رايانامە:
انتخاب و تعادلی مناسب در بین فناوری و حقوق ورزشکاران فراهم گردد.	shojaei.vahid@yahoo.com
<b>روش شناسی:</b> پژوهش حاضر از نظر هدف کاربردی میباشد و به روش کیفی با استفاده از رویکرد	
پدیدارشناسی توصیفی انجام شد. افراد مشارکتکننده در پژوهش حاضر شامل: اعضای هیئت علمی دانشگاه در	
گروه مدیریت ورزشی، حقوق، حقوق ورزش، مدیران ارشد وزارت ورزش و جوانان، مربیان و ورزشکاران، در سال	
۱۴۰۲ تشکیل میدادند. روش نمونهگیری به صورت هدفمند بود. ابزار گردآوری دادهها، مصاحبه نیمهساختاریافته	
با پرسشهای باز بود. بهمنظور معتبرسازی نهایی پژوهش از ملاکهای اعتبار و قابلیت اعتماد استفاده شد.	
<b>نتایج:</b> طبق اطلاعات حاصل از مصاحبه با خبرگان پژوهش، چالشها و راهکارهای حقوقی پیشرفت فناوری در	
صنعت ورزش، شامل ۵۴ مضمون فرعی در قالب ۶ مضمون اصلی: حریم خصوصی ورزشکاران، آسیبدیدگی	
ورزشکاران، تعارضات اخلاقی، مشکلات داوری، مالکیت فکری و پخش زنده، میباشد.	
<b>نتیجه گیری:</b> توجه به چالشرهای پدیدارشده با پیشرفت فناوری در صنعت ورزش، موضوعی بسیار مهم است؛	
چراکه سبب استفاده کامل و بهینه از ظرفیت ورزشکاران و مربیان میگردد. همچنین توجه به حفظ عدالت و	
ارزشهای اخلاقی حاکم بر ورزش با پیشرفت فناوریهای جدید نیز ضروری بهنظر میرسد؛ زیرا منجر به استفاده	
مطلوب و برابر ورزشکاران از کاربرد فناوری در ورزش میشود. بنابراین مدیران ذیربط میبایست در راستای	
حفظ ارزشهای بیانشده، از مطالب پژوهش حاضر استفاده کنند.	
واژههای کلیدی	استناد به این مقاله:
چالشهای حقوقی، حریم خصوصی، فناوری، ورزش	شجاعی، وحید؛ حبیبی کلاچایه، زهرا؛ براری
	بيجارگاه، پدرام؛ و اديب چماچايي، فاطمه.
	شناسایی چالشهای حقوقی پیشرفت فناوری در
	صنعت ورزش (با ارائه راهکار). نشریه فناوری ورزشی پیشرفته، (۱۴۰۳)؛ ۹۸(۲)، ۵۵–۶۴
https://jast.uma.ac.ir/	DOI: 10.22098/jast.2025.3613