



9th edition

New technologies and AI as game changing tools in the sport sector

EASE

European Association of Sport Employers

With the participation of our members



CONFEDERAZIONE DELLO SPORT



The infographic is based on the presentation of Doctor Alberto Carrio Sampedro and additional information relevant to this presentation.

The Rise of New Technologies & AI in Sports

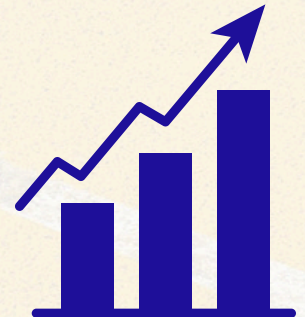
Key Applications:

- **AI-Assisted Officiating** (e.g., VAR in football, Hawk-Eye in tennis...)
- **Performance Analysis** (biometric sensors, wearable tech, big data)
- **Coaching & Training** (predictive AI for injury prevention, automated tactics)
- **Fan Engagement & Broadcasting** (augmented reality, personalized sports content)
- **E-Sports & Virtual Sports** (metaverse sports, AI-generated avatars)



Market Growth

- The global sports technology market was valued at \$18.85 billion in 2024 and is projected to grow at a CAGR of 21.9% from 2025 to 2030.
- Another report estimates the market will reach \$65.16 billion by 2034, with a CAGR of 11.20% from 2025 to 2034.



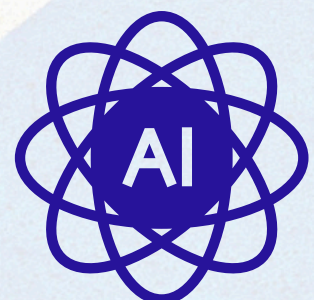
Investment & Spending

- Wearable sports technology is expected to reach \$74.7 billion by 2032, driven by demand for biometric tracking and AI-assisted performance analysis (Precedence Research, 2024).
- AI-powered sports analytics is projected to grow from \$2.1 billion in 2022 to \$19.9 billion by 2032 (Future Market Insights, 2023).



AI & Performance Optimization

- 68% of elite sports teams now use AI-driven performance analytics to enhance training and injury prevention.
- Automated referee systems (VAR, Hawk-Eye, AI-assisted officiating) are now used in over 30 major leagues and tournaments worldwide (FIFA, ITF, NBA...).



How Europe and European countries intend to face this digital revolution?

European sports entities are increasingly leveraging digital tools to enhance **performance and fan engagement**. A report by the Global Sports Innovation Center highlights that European sports organizations are focusing on areas such as **data analytics, wearable technology, and virtual reality** to stay competitive.

For instance, during the 2024 Olympic Games, French 4 × 100-meter relay teams utilized **virtual reality** to improve baton exchanges. Developed by the Institute of Movement Sciences at Aix-Marseille University, this tool allowed athletes to practice in a simulated Stade de France environment, **optimizing performance without injury risk**.

Additionally, European fans are adopting digital platforms to enhance their **sports consumption** experience. In 2022, many Europeans followed sports events remotely via social media, virtual reality, e-sport streaming platforms, and podcasts, underscoring the **growing role of technology in sports engagement**



Technological & Practical Innovations in European Sports



- Researchers at the University of Fribourg in Switzerland have developed an augmented reality system using holographic goalkeepers to improve penalty-taking skills. Experiments with youth players showed a 28% improvement in performance, with potential increases up to 35% through enhanced sensory-motor responses.



- Data Analytics for Strategy: The German national football team utilizes SAP software to collect and analyze data on opponents, providing real-time insights and visual analyses to inform in-game decisions, including penalty shootouts.

Concerns regarding the Growth of New Technologies in the Sport Sector



The rise of AI and new technologies in sports raises critical legal and ethical issues, particularly in **data privacy, fairness, and athlete autonomy**. The mass collection of biometric data challenges consent and security, while algorithmic biases can lead to unfair recruitment or officiating decisions. Excessive reliance on AI may also undermine **athlete identity and decision-making**. Additionally, AI-assisted cheating and data misuse threaten **sports integrity**. Legal frameworks must adapt to ensure **transparency, accountability, and fairness** in this rapidly evolving landscape.



Wearable devices, smart cameras, and biometric sensors track every detail of an athlete's health and performance.

Where should the line be drawn between **useful analysis and invasive surveillance**?

Do athletes own their performance and biometric data, or do clubs, sponsors, and tech companies have the **right to exploit it**?



With real-time data being constantly monitored, how can we prevent the **misuse of sensitive health and biometric information**?

Is athlete data being turned into **a commodity**, with teams, sponsors, and betting companies **profiting from it without fair compensation**?



Should there be **international regulations** to protect athletes' rights over their data and decisions? What **ethical principles** should govern AI's role in talent scouting, injury prediction, and training programs?

✦ **Alberto Carrio Sampedro**
(Doctor, Universitat Pompeu Fabra):

"AI in sports must respect human dignity, fairness, and transparency to truly benefit athletes and stakeholders."

✦ **Arsène Wenger** (Director of World Football Development; Former Arsenal Manager):

"Technology can help referees make better decisions, but we must ensure that it does not remove the human element from the game."

✦ **Pep Guardiola** (Manchester City Manager):

"We use technology to analyze games, but in the end, football is played with passion and instinct."

What will sport employers have to plan for in the future?



Workforce Transformation:

- Will human expertise become secondary to data?
- With AI-assisted training programs, should employers prioritize hiring data analysts over traditional coaches?
- How do employers retrain staff to integrate AI insights into their decision-making processes?



Strategic Considerations:

- ✓ Invest in hybrid training programs that blend AI knowledge with traditional sport work expertise.
- ✓ Encourage interdisciplinary teams combining data scientists, sports scientists, and coaches.
- ✓ Define clear roles to balance AI recommendations with human expertise.



Ethical & Legal Risks in Workforce Management:

- AI is increasingly used for talent identification, but could it introduce biases against certain demographics (e.g., gender, race, physical traits)?
- Should AI-generated performance predictions influence contracts, salaries, and career decisions?
- Could AI tools lead to unfair dismissal or selection of athletes and staff based on biased algorithms?



Strategic Considerations:

- ✓ Implement transparent AI policies to ensure fair decision-making.
- ✓ Use diverse datasets to prevent bias in AI recruitment tools.
- ✓ Ensure legal compliance with GDPR and other data protection regulations.