

DIGITAL TRANSFORMATION: CHALLENGES AND OPPORTUNITIES IN SPORT MANAGEMENT

TRANSFORMACIÓN DIGITAL: RETOS Y OPORTUNIDADES EN LA GESTIÓN DEL DEPORTE

Ana M^a Gallardo-Guerrero¹ 

María J. Maciá-Andreu¹ 

¹ Facultad de Deporte, UCAM, Universidad Católica San Antonio de Murcia, Murcia, Spain

Introduction

The advent of the fourth Industrial Revolution, a term coined by Klaus Schwab, founder of the World Economic Forum, is characterised by a range of new technologies that are merging the physical and digital worlds, bringing with them shifts in power, wealth and knowledge (Xu et al., 2018). This Revolution differs from previous ones in its exponential speed, breadth and depth, changing not only the what or how of things, but also who we are, as well as the impact on systems, characterised by a complete industrial and business transformation that also entails profound social change (Schwab, 2016).

Within this Revolution, one of the most relevant trends is the integral and continuous influence of digital technologies, which is usually summarised by the term 'digital transformation', understood as a process that "aims to improve an entity by triggering significant changes in its properties through combinations of information, computing, communication and connectivity technologies" (Vial, 2019, p. 118). This digital transformation is set as a key element for the economic and strategic development of the European Union, materialising the Digital Decade roadmap, which sets specific targets and milestones in the digital domain to be achieved by 2030 (Council of the European Union, 2022).

The changes associated with the digital era can be seen both in social relations and in the workplace, although the digital transformation is about people, not technology, which can be understood more as a tool, so the ability to work with it is essential. This is why organisations must develop their corporate culture to enable the implementation of these technologies (Slotnisky, 2016). This fact presents companies with unparalleled challenges, requiring a systematic effort of deep integration between industry and digital technology to achieve economic transformation (Wang et al., 2024).

Digital transformation in sports management

Nowadays, sport is an extremely complex phenomenon that affects physical culture, education policy and health, and its economic and social importance is increasingly highlighted (Soto-Fernández et al., 2022). This makes it possible to speak of a 'sports industry', in which technological development plays one of the most important roles in its evolution (Ágnes et al., 2024), with the sports field being one of the areas in which its impact has become stronger in recent years, through a wide variety of technologies and equipment aimed at improving and optimising sporting activity at different levels (Gallardo & García-Unanue, 2023).

This situation was further boosted by the COVID-19 pandemic, which meant that sports organisations had to adapt quickly and unexpectedly, becoming more aware of both their weaknesses in the digital environment and the opportunities that lay ahead at all levels, from amateur to high performance sport (Jiang, 2023). This led to changes at the organisational level that persist nowadays and have been the driving force for the sports sector to be immersed in the process of digital transformation (Glebova et al., 2022).

Therefore, sports organisations are no strangers to digitalisation and must carry out their own digital transformation (Magaz-González et al., 2023), since technology is part of everyday life and some of these technological advances have their place within sport, helping in a general way to improve its different areas (Habibi & Khairandish, 2023).

The implementation of these innovations in the area of digital transformation is of great help for sport organisations that must cooperate and compete in large geographical areas (Barnhill & Smith, 2022), mainly due to the significant differences depending on the country concerned, the type of organisational structure or external structure where the institution is hosted (Ehnold et al., 2020). Therefore, sport organisations must adapt to the new needs demanded by society, showing



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the use of technological innovations of various kinds and catering to all stakeholders that are part of the sport ecosystem (Schmidt, 2020).

This commitment to technological innovation not only improves internal operations, but also enriches the experience of users and spectators, marking a significant change in the perception of and interaction with sport. This drive towards digital transformation has led to a marked improvement in sporting performance and revolutionised the spectator experience, highlighting the importance of developing comprehensive innovation management strategies (Ratten, 2020).

In the wake of this major revolution, sport managers are faced with the need to adapt their processes to satisfy customers, business partners and employees, which implies a profound rethinking of their business and operational models (Jiang, 2023). In this sense, it is crucial that sport management professionals implement management software specifically designed for their needs, which not only facilitates adaptation to these changes, but also substantially improves the quality of management in sport organisations and facilities (Gallardo et al., 2008).

This transformation in the sports industry has also revolutionised communication with fans and spectators, significantly improving information management in sports. This revolution has not only optimised event organisation, ticketing and marketing through mobile applications (Li & Wang, 2011), but also transformed the spectator experience by offering new forms of interaction such as virtual reality broadcasts in which spectators can enjoy an immersive and personalised experience (Ráthonyi et al., 2018) and redefining spectator experiences by using interviews and qualitative analysis to assess the impact of digitisation (Glebova & Desbordes, 2021), all of which facilitate more efficient management and better communication with fans.

Conclusions

As discussed above, technology applied to sport management is a constantly evolving field that offers numerous advantages for improving sport performance, management efficiency and the experience of participants and spectators, highlighting the importance of adopting innovative approaches and strategies for managing technology in sport.

This is why it is essential, in a rapidly and constantly changing environment, to have research related to digital transformation in the field of sport and, specifically, in the field of sport management, to provide knowledge to professionals and researchers in the sector, serving as a basis for the effective implementation of new resources in sports organisations.

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