



Digital Transformation in Sports Management and Its Impact on Sports Journalism

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ABSTRACT: Digital transformation has emerged as a decisive factor, radically reshaping organizational practices, communication strategies, and the role of stakeholders in the sports ecosystem. By employing advanced digital technologies such as big data, customer relationship management (CRM) systems, and social media platforms, sports organizations enhance administrative efficiency and intensify audience interaction. Concurrently, sports journalism is undergoing substantial changes: organizations now communicate directly with fans through digital channels, thereby diminishing the traditional role of journalists. To remain competitive, journalists must acquire new skills, including data analysis, multimedia production, and digital storytelling. At the same time, concerns arise regarding the reliability of information in an environment characterized by rapid news dissemination. This study investigates the impact of digital transformation on the management of sports organizations and its influence on sports journalism. Overall, this research highlights the challenges and opportunities stemming from the evolving dynamics between organizations, journalists, and audiences, underscoring the importance of continuous education, adaptability, and innovation.

KEYWORDS: digital transformation, sport management, sport journalism, fan engagement

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I. INTRODUCTION

Rationale

Digital transformation represents one of the most significant developments in the global sports industry over the past two decades. The integration of new technologies—such as social media platforms, artificial intelligence (AI), big data, and advanced analytics—has profoundly altered the operation of sports organizations (Ratten, 2020; Lago et al., 2022; Choustoulakis & Pastelakos, 2024). In particular, management practices, communication strategies, and commercial planning are now increasingly data-driven (Pope & Kirk, 2014; Parnell et al., 2021). Sport, as both a social and economic phenomenon, has responded more rapidly to these technological opportunities compared to other sectors (Billings et al., 2017; Hutchins & Rowe, 2019; Choustoulakis et al., 2025). This responsiveness stems from the nature of the “sports product,” which is a live event requiring continuous information flows and constant fan engagement (García & Meier, 2021).

The COVID-19 pandemic accelerated this transformation. With fans unable to attend stadiums, sports organizations adopted innovative digital solutions (Watanabe et al., 2022; Pizzo et al., 2022). For example, they implemented live streaming, developed exclusive online content, and introduced virtual fan engagement programs (Pedersen & Thibault, 2022). Leading clubs such as Manchester City and Juventus utilized virtual reality (VR) and augmented reality (AR) technologies, allowing fans to experience matches remotely (Li & Burrow, 2020; Theodoropoulou, 2021).

At the same time, sports journalism has been compelled to adapt to an environment where organizations have assumed the role of “content producers.” Clubs now release news, videos, statistics, and interviews directly through official digital channels (Sanderson & Kassing, 2014; English, 2017). This shift has generated debate about the evolving role of journalists: the modern sports reporter must combine traditional investigative skills with digital competencies such as data analysis, multimedia production, and digital storytelling (Hutchins & Rowe, 2012; Boyle, 2017; Sherwood & Nicholson, 2020).

Scope of the research

This study focuses on the Greek context, examining the practices of key actors such as the Hellenic Olympic Committee, Olympiacos, the Hellenic Basketball Federation, and Panathinaikos, while also incorporating insights from the International Olympic Committee. The aim is to highlight how digital transformation reshapes management practices, redefines the relationship between organizations and fans, and influences the role of sports journalists. This study seeks to explore in depth the implications of digital transformation on sports management, with particular emphasis on its impact on sports journalism and fan experience. The research is designed to address how emerging technologies reshape the internal structures and external interactions of sports organizations, while also redefining the professional practices of journalists.

Research objectives and research questions

The specific research objectives are:

- To analyze how technological innovations—such as social media platforms, streaming services, and big data analytics—redefine the administrative practices of sports organizations.
- To investigate the evolving relationship between sports organizations and sports journalists within the digital environment.
- To examine how consumer behaviors and fan expectations regarding the consumption of sports content are being transformed in the digital era.

Accordingly, the study addresses the following research questions:

- RQ1: How do technological innovations (social media, streaming, big data) redefine the management practices of sports organizations?
- RQ2: How is the relationship between sports organizations and sports journalists being reshaped within the digital ecosystem?
- RQ3: What changes have been observed in the consumption patterns and expectations of fans regarding sports content?

II. LITERATURE REVIEW

Theoretical Framework

Beyond technological innovations, the interpretation of changes brought about by digital transformation in sport can be enriched by theoretical perspectives from organizational and management studies. One such framework is Chelladurai's (1999) multidimensional model of leadership, which provides insights into how managers and administrators adapt their leadership and managerial functions under conditions of digitalization. This model highlights the dynamic interplay between situational demands, organizational expectations, and technological innovation. Additionally, Slack and Parent's (2006) theory of organizational change emphasizes that the adoption of technological innovations is not solely a technical process but also a cultural one, with substantial implications for internal dynamics and decision-making processes within sports organizations. This perspective is particularly useful in understanding the challenges of digital integration in environments where traditional hierarchies and practices dominate.

Furthermore, stakeholder management theory contributes to understanding the shifts in power relations between organizations, journalists, and audiences. In a digital context, the emergence of direct-to-fan communication channels has altered the traditional balance of influence. Organizations are no longer dependent on journalists as intermediaries, thereby compelling media professionals to redefine their role and value proposition in the communication process.

From a technological perspective, digital transformation can be broadly defined as the integration of modern technologies into all levels of an organization, aiming to enhance efficiency, communication, and consumer experience (Brennen & Kreiss, 2016). In sports, this integration extends beyond administrative processes and penetrates the very core of the sports product as it is experienced by fans, athletes, and stakeholders (Ratten, 2016).

The rise of social media platforms (e.g., Facebook, Instagram, Twitter, TikTok) has created new, interactive communication channels that transform fans from passive recipients into active community members (Boyle, 2017). At the same time, big data technologies enable organizations to capture real-time insights into audience needs, thereby facilitating the creation of personalized fan experiences. Investments in CRM systems, data analytics, and AI applications have significantly enhanced audience targeting, particularly in large-scale events such as the Olympic Games or international football tournaments (Ratten & Dickson, 2020).

In summary, the literature establishes digital transformation as a multidimensional phenomenon that reconfigures organizational structures, stakeholder relationships, and professional practices. This framework serves as the basis for analyzing the empirical cases presented in this study. Below, Figure 1 illustrates how digital transformation shapes sports organizations and sports journalism, leading to the development of integrated digital ecosystems and the redefinition of roles and practices.

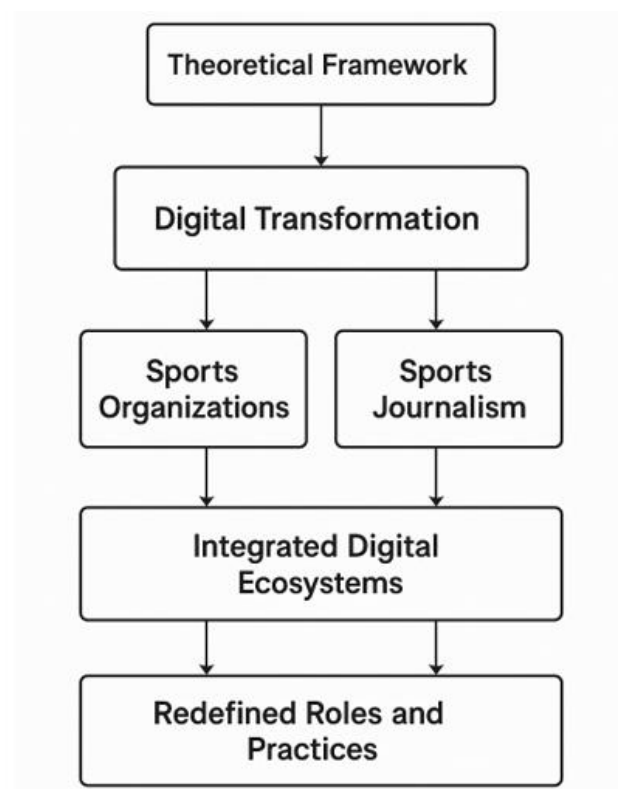


Figure 1 Theoretical framework of the study

III. CASE STUDIES

Digital transformation has profoundly altered the management of sports organizations, particularly in marketing, communication, and fan engagement. The following case studies illustrate how selected Greek and international organizations have adopted and implemented digital strategies.

Olympiacos: Olympiacos, one of Greece’s most prominent football clubs, has strategically invested in social media platforms to strengthen its global brand. The club maintains active accounts on Facebook, Instagram, Twitter, TikTok, and YouTube, where it runs campaigns with hashtags such as *#WeKeepOnDreaming* and *#RedTogether* to enhance brand recognition and international reach. Exclusive content—including behind-the-scenes footage, training session videos, podcasts, and player interviews—forms part of its digital offering. Additionally, the launch of the “Olympiacos TV” platform has enabled the direct distribution of content to fans, bypassing traditional media outlets and establishing the club as a self-sufficient content producer.

Panathinaikos: As a multi-sport organization, Panathinaikos has developed a comprehensive digital ecosystem. This includes mobile applications for online ticket sales, streaming services for basketball and football matches, and fan engagement programs such as fan tokens (in collaboration with Socios.com). These initiatives align with the international trend of “Fan Engagement 2.0”, which emphasizes personalized experiences for supporters through digital platforms. By employing analytics tools and behavioral data, Panathinaikos enhances its capacity to deliver tailored services and foster loyalty among its fan base (Parganas, Anagnostopoulos & Chadwick, 2015).

Hellenic Basketball Federation: The HBF has adopted interactive communication practices to strengthen its connection with fans and stakeholders. It provides live streaming of youth competitions, produces educational content for coaches and athletes, and developed digital press rooms during the COVID-19 pandemic, ensuring continuity in media coverage.

These initiatives not only maintained journalistic workflows but also set a precedent for hybrid forms of digital sports communication, highlighting the adaptability of federations to unforeseen challenges.

Hellenic Olympic Committee: The HOC incorporated innovative digital strategies during the Tokyo 2020 Olympic Games. Special digital campaigns were designed to showcase Greek athletes across social media platforms, combining short documentaries, collaborations with influencers, and live Q&A sessions. This multi-platform approach successfully increased fan engagement and attracted younger audiences. By blending promotional, educational, and participatory elements, the HOC leveraged digital media to strengthen national pride and international visibility.

International Olympic Committee: The IOC is a global pioneer in digital innovation. Its creation of the Olympic Channel provides 24/7 high-quality content, including documentaries, live coverage, and exclusive interviews. The channel's multilingual capacity ensures broad accessibility and global outreach. Moreover, the IOC invests heavily in artificial intelligence and big data analytics to study user behavior, personalize content delivery, and strengthen the dissemination of Olympic values (Billings et al., 2017). These practices demonstrate how advanced technologies can reinforce both the symbolic and commercial dimensions of sport at an international level.

Impacts on Sports Journalism

The dominance of digital platforms and direct-to-fan strategies has significantly altered the role of sports journalists. Traditionally, journalists served as the primary mediators between organizations and the public, delivering exclusive news and shaping narratives. Today, however, sports organizations have become content producers in their own right, diminishing journalists' gatekeeping role and forcing them to adapt to new professional demands.

The Changing Role of Journalists

The emergence of social media has enabled clubs and federations to bypass traditional media by publishing official announcements, match updates, interviews, and highlights directly through their own channels (Hutchins & Rowe, 2012). As a result, journalists are no longer the sole conveyors of information but must reposition themselves as analysts, interpreters, and commentators who add value beyond the official narratives produced by organizations.

Real-time practices such as live-tweeting, instant video highlights, and podcasts have become standard in modern sports reporting (Singer, 2014). Yet the increasing pressure to deliver content rapidly often conflicts with the professional obligation to provide accurate and verified information. For example, during matches involving Olympiacos or Panathinaikos, fans can immediately access real-time updates from official club channels. Journalists, therefore, must focus more on producing in-depth analysis, investigative reporting, and interpretive commentary to differentiate their work from official team outputs.

To remain competitive in the rapidly evolving digital ecosystem, sports journalists are required to cultivate a diverse set of digital competencies that complement their traditional investigative skills. A crucial aspect of this skill set is the ability to interpret sports statistics and audience metrics through the use of advanced analytics tools, enabling data-informed reporting. Equally important is proficiency in multimedia production, encompassing the creation and editing of video content, podcasts, infographics, and other interactive formats that enhance audience engagement. Knowledge of search engine optimization (SEO) and social media management has also become indispensable, as journalists must ensure the visibility and accessibility of their work within highly competitive online environments. Moreover, the capacity for data-driven storytelling, which integrates statistical insights with patterns of digital engagement, allows journalists to craft narratives that are both compelling and relevant to contemporary audiences. The successful sports journalist is therefore one who can seamlessly integrate these digital practices with traditional reporting standards, producing content that is at once accurate, engaging, and responsive to the demands of the digital era (Lowes & Robillard, 2018).

The transition to a digital-first environment introduces a number of significant challenges for sports journalism. Foremost among these is the issue of verification under time pressure, as the relentless pursuit of immediacy can compromise journalistic reliability and heighten the risk of misinformation. Journalists also face the problem of audience fragmentation, given that fans now consume content across a multitude of platforms, requiring more diversified distribution strategies to preserve relevance and reach. At the same time, the growing tendency of sports clubs and federations to produce their own content intensifies competition and compels journalists to redefine their role, placing greater emphasis on independent perspectives, accountability, and critical analysis. Within this shifting landscape, adaptability emerges as a fundamental competency. Journalists must not only integrate technological tools into their professional practices but also safeguard the integrity of their work, navigating the delicate balance between speed and authenticity that characterizes contemporary digital communication.

IV. METHODOLOGY

Given the complexity of digital transformation and its heterogeneous impact across organizational and cultural contexts, this study employed a qualitative research design grounded in the case study approach. The case study methodology was selected as the most appropriate strategy to capture the multifaceted nature of digital transformation in sports organizations. Unlike quantitative methods that emphasize generalizability and measurement, the case study approach enables an in-depth, context-sensitive exploration of organizational practices, narratives, and strategies (Yin, 2014). This is particularly important in environments where

quantitative data, such as internal CRM records or detailed engagement analytics, are either confidential or only partially accessible.

The case study method is well-suited to studies of digital transformation in sport for two reasons. First, it allows researchers to examine phenomena in their real-life context, where technological innovations, organizational decision-making, and audience behaviors interact dynamically. Second, it facilitates a holistic understanding by integrating multiple data sources and perspectives, thereby producing richer insights than a single-method design would allow. By employing this approach, the study acknowledges the social, cultural, and institutional embeddedness of digital technologies in sports management and journalism.

The credibility of the research was reinforced through methodological rigor. Triangulation was achieved by integrating multiple data sources, including social media analytics, secondary reports, and expert interviews where available, thereby minimizing the risk of bias from a single source. Transparency was also prioritized, with all protocols for data collection and analysis documented in detail to ensure replicability.

The study adhered strictly to principles of research ethics. Only publicly available data were analyzed, all sources were accurately cited, and no confidential organizational material was disclosed. Care was also taken to represent organizational practices fairly and accurately, avoiding overgeneralization.

Despite its strengths, the methodology is subject to certain limitations. The focus on digital platforms means that the continuing influence of traditional media, such as television and print journalism, is only partially addressed. Moreover, the 12-month period of data collection, while sufficient to capture significant events, may not reflect longer-term patterns of digital transformation or cyclical changes within organizations. Future research could extend this temporal scope or integrate mixed-methods approaches to strengthen the generalizability of findings.

Research Design

The research was structured around case studies of five organizations: the Hellenic Olympic Committee (HOC/EOE), which is responsible for Greece's representation in the Olympic Games and functions as a national governing body; Olympiacos, a leading Greek football club with strong domestic dominance and international presence; Panathinaikos, a multi-sport association with extensive fan engagement across several disciplines; the Hellenic Basketball Federation (HBF/EOK), which governs the sport of basketball in Greece; and the International Olympic Committee (IOC), a global institution and pioneer in the use of digital media for sport and communication.

The selection of these organizations was purposive, reflecting their historical and commercial significance, their institutional roles within Greek and global sport, and their relative levels of innovation in adopting digital technologies. This purposive sampling strategy ensured diversity in organizational type (club, federation, committee) and scale (national versus international), allowing for comparative insights into how different institutional settings approach digital transformation.

Data Collection

Data collection relied on two complementary methods. First, content analysis was conducted on the official digital channels of the organizations. This included social media platforms such as Facebook, Instagram, Twitter, TikTok, and YouTube, as well as official websites, press releases, blogs, and digital campaigns incorporating hashtags, videos, and podcasts. Data were gathered over a 12-month period (July 2023–June 2024), which covered an entire competition season and several major events, including the Final Four and the Olympic Games.

Second, desk research was undertaken to collect secondary sources such as academic publications, industry reports, IOC documents, and evaluations of digital campaigns. This method provided a broader context for interpreting organizational practices and allowed for triangulation with primary data sources.

Data Analysis

The data analysis process was conducted using qualitative and interpretive techniques, supported by NVivo software. An initial round of thematic coding identified key categories such as social engagement, real-time content, and digital storytelling practices. These themes were then compared across cases using a comparative case analysis framework to identify convergences and divergences in organizational strategies. The findings were further interpreted through relevant theoretical lenses, particularly Jenkins' (2012) theory of participatory fan culture, which contextualized how digital platforms reconfigure fan–organization interactions.

V. RESULTS

The analysis of the five case studies revealed a number of common patterns in the adoption of digital technologies, while also underscoring important differences in scope, scale, and strategic orientation. Collectively, the findings illustrate that sports organizations are increasingly constructing digital ecosystems that

not only facilitate direct communication with fans but also reconfigure managerial practices and professional roles. At the same time, each organization reflects unique institutional characteristics that influence how digital transformation is enacted.

Digital Strategies and Innovations

All five organizations examined in this study have embraced multi-layered digital strategies designed to strengthen their direct engagement with fans and stakeholders. The Hellenic Olympic Committee operates an integrated digital platform that incorporates interactive videos, live streaming of events, and multimedia storytelling projects. Its social media presence is strategically curated to combine informational, educational, and promotional content, thereby advancing Olympic values and fostering national pride. Olympiacos stands out for its comprehensive use of multiple digital channels, including its official website, mobile application, and highly active accounts on Facebook, Instagram, Twitter, and TikTok. Through real-time campaigns, live match streaming, and exclusive behind-the-scenes content, Olympiacos strengthens its brand identity while cultivating both domestic and international fan loyalty.

Panathinaikos places significant emphasis on personalization, developing loyalty applications and producing tailored digital content. The integration of big data analytics enables Panathinaikos to monitor fan behavior, assess preferences, and deliver targeted communication, thereby enhancing the overall fan experience. The Hellenic Basketball Federation, by contrast, prioritizes digital coverage of competitions, utilizing live streaming, podcasts, and online seminars to promote grassroots engagement and professional development. Its heavy reliance on social media platforms creates a space for real-time interaction, demonstrating the federation's commitment to accessibility and inclusivity. At the global level, the International Olympic Committee leads innovation with the Olympic Channel, a platform that provides multilingual, high-quality multimedia content around the clock. The IOC has also been at the forefront of integrating big data and artificial intelligence into its operations, optimizing both fan engagement and internal organizational communication (Billings et al., 2017).

Fan Engagement and Social Media Practices

Although all organizations studied recognize the central role of fan engagement, the strategies they employ vary considerably. The HOC adopts a participatory model, encouraging fans to contribute to campaigns and share digital content, thereby fostering an interactive community centered on the Olympic movement. Olympiacos integrates elements of gamification and organizes online competitions, reinforcing fan identity and community building. Panathinaikos adopts a more personalized approach, leveraging user analytics to provide tailored services, exclusive digital privileges, and targeted offers, which in turn enhance loyalty. The HBF employs podcasts and webinars as tools to address both fans and professionals, striking a balance between community engagement and technical knowledge dissemination. Finally, the IOC's global campaigns are characterized by their dual focus on education and promotion. These campaigns seek to instill Olympic values while reaching highly diverse international audiences, highlighting the IOC's ambition to blend cultural symbolism with modern digital outreach.

Impacts on Sports Journalism

The findings confirm that the direct dissemination of content by sports organizations has fundamentally redefined the role of journalists. Whereas journalism was once primarily concerned with transmitting information from organizations to the public, it is now shifting toward the production of analytical, multimedia, and interpretive content. The rise of direct-to-fan strategies has eroded the exclusivity of traditional reporting, requiring journalists to focus increasingly on commentary, critique, and contextualization rather than simple information relay. Moreover, the prevalence of real-time practices such as live tweeting and instant video highlights has increased the immediacy and interactivity of coverage, but this has also created significant challenges regarding verification and journalistic accuracy. The tension between speed and reliability continues to shape the contemporary practice of sports journalism, compelling professionals to adapt their methods while maintaining credibility.

Use of Big Data and CRM Systems

Across the organizations analyzed, the use of data-driven technologies is widespread, though the scope and sophistication of implementation vary. The general trend points to the growing reliance on big data analytics as a means of enhancing audience targeting, improving marketing efficiency, and refining fan experiences. Both Panathinaikos AC and the HOC have adopted CRM systems, which allow for a more individualized approach to fan relationship management, including personalized communications and loyalty-building initiatives. The IOC has extended this logic further, applying advanced big data applications not only to audience engagement but also to operational aspects such as performance analysis, event scheduling optimization, and assessments of

event popularity. The results indicate that data-driven strategies are becoming indispensable to sports management at both the national and international levels.

Challenges and Opportunities

The transition to fully digital ecosystems has generated both challenges and opportunities for sports organizations and related stakeholders. On the one hand, the rapid evolution of technologies necessitates continuous staff training and professional development, creating pressure on organizations to invest in human capital. Equally pressing is the challenge of ensuring the reliability and credibility of information in fast-paced digital environments where immediacy often takes precedence. Organizations also face the demand for innovative content formats—such as immersive virtual and augmented reality experiences or interactive storytelling—that can capture and maintain the attention of increasingly distracted audiences.

On the other hand, the opportunities created by digital transformation are equally significant. Digital platforms expand the accessibility and global visibility of sports organizations, particularly in the Greek context, allowing them to transcend national boundaries and engage with international audiences. Personalized communication strategies contribute to stronger fan loyalty, while the ability to interact directly with supporters opens new avenues for commercial growth and brand development. At a broader level, the emergence of these digital ecosystems strengthens the position of organizations within international sporting networks, underscoring the transformative potential of digital technologies in reshaping the global sports industry.

VI. DISCUSSION

This study demonstrates that digital transformation is profoundly reshaping both the management of sports organizations and the practice of sports journalism. The findings confirm the central role of technological innovation in redefining organizational strategies, reshaping modes of fan engagement, and transforming journalistic practices. These insights align with theoretical perspectives that conceptualize digital transformation as a multidimensional process of organizational and cultural change, rather than a purely technological development (Brennen & Kreiss, 2016; Reis et al., 2018; Nambisan et al., 2017).

Digital Ecosystems in Sports Organizations

The case studies show that sports organizations are no longer content with maintaining a minimal online presence. Instead, they are actively constructing integrated digital ecosystems that combine live streaming, analytics, customer relationship management (CRM) systems, and personalized communication tools (Ratten, 2016; Hutchins & Rowe, 2019). Such ecosystems expand the reach of sports brands globally, diversify revenue streams, and enhance the overall fan experience through more interactive and tailored services (Billings et al., 2017; Pedersen & Thibault, 2022). Importantly, the findings indicate that digitalization is not a uniform process but one that is highly context-dependent (Parnell et al., 2021). National organizations such as the Hellenic Olympic Committee and the Hellenic Basketball Federation emphasize educational and participatory initiatives, using digital tools to foster inclusion and promote grassroots involvement (García & Meier, 2021). Professional clubs such as Olympiacos and Panathinaikos, by contrast, prioritize fan engagement and brand internationalization, adopting strategies that strengthen loyalty while projecting their identities to global audiences (Richelieu & Pons, 2011; Watanabe et al., 2022). The International Olympic Committee, operating at the highest international level, has adopted cutting-edge technologies such as artificial intelligence and advanced analytics to maintain global leadership and ensure long-term relevance (Chappelet, 2018; Ratten & Dickson, 2020). This diversity illustrates a broader trend whereby digital transformation becomes a strategic core of organizational functioning, embedded in long-term planning rather than treated as a complementary or peripheral activity.

Implications for Sports Journalism

The diminishing intermediary role of traditional journalism underscores the urgency of redefining professional practices in this field. As sports organizations increasingly publish direct-to-fan content through their digital platforms, journalists are being displaced from their historic role as gatekeepers of information (Boyle & Haynes, 2020; English, 2017). They are now required to transition toward interpretive, analytical, and investigative functions that add value beyond official narratives (Singer, 2014; Sherwood & Nicholson, 2020). Yet, this shift brings with it a persistent tension between the speed and immediacy demanded by digital environments and the credibility and reliability that remain central to journalistic integrity (Singer, 2014). The professionalization of digital storytelling, as noted by Lowes and Robillard (2018), emerges as a critical pathway for addressing this tension. By integrating traditional reporting standards with innovative multimedia formats such as podcasts, video analysis, and data-driven narratives, journalists can reposition themselves as “hybrid professionals” who operate effectively across both traditional and digital domains (Hutchins & Rowe, 2012; Boyle, 2017).

Personalization and Data-Driven Strategies

The findings also reveal that the use of big data and CRM systems in Greek sports organizations reflects a broader international trend toward personalization and loyalty-building (Watanabe et al., 2019; Pizzo et al., 2022). By identifying fan preferences and tailoring services accordingly, organizations can deepen engagement and improve commercial performance (Li & Burrow, 2020). However, these strategies raise important ethical and professional challenges. Concerns about data privacy and protection are increasingly prominent, as are debates over the risks of over-commercialization of fan relationships (Lange, 2021). Furthermore, there is a danger that fans without reliable digital access may become marginalized, creating new forms of exclusion within the sports community (Rowe, 2020). These dynamics resonate with Jenkins' (2012) theory of participatory fan culture, which acknowledges fans as active participants while simultaneously drawing attention to the ways in which participation is shaped—and sometimes constrained—by organizational strategies of surveillance and data monetization (Andrejevic, 2014).

The Challenge of Sustainability in Digital Transformation

Although digital transformation offers significant opportunities for innovation and growth, its long-term sustainability depends on several factors. Organizations must invest continuously in staff training and reskilling to ensure that their personnel can adapt to rapidly evolving technologies (Parnell et al., 2021). Institutional commitment to infrastructure development is also critical, as digital ecosystems require both technical capacity and organizational readiness (Kitchin, 2014). Finally, coherent communication policies are needed to balance the pursuit of innovation with the maintenance of quality standards (Pedersen & Thibault, 2022). For Greek sports organizations, in particular, alignment with global best practices—as exemplified by the IOC—requires not only financial resources but also cultural adaptation, ensuring that technological adoption is embedded in broader organizational strategies (Chappelet, 2018).

Contributions to Theory and Practice

From a theoretical standpoint, this study reinforces the notion that digital transformation shifts communication models away from unidirectional flows of information toward participatory, interactive, and data-driven dynamics (Jenkins, 2012; Hutchins & Rowe, 2019). By applying perspectives from organizational theory, stakeholder management, and fan culture theory, the study enriches our understanding of how digital ecosystems alter relationships between institutions, journalists, and audiences (Freeman, 2010; Ferkins & Shilbury, 2015). From a practical perspective, the findings highlight that successful digital transformation requires more than the introduction of new technologies. It demands organizational adaptability, cultural change, and interdisciplinary knowledge exchange (Ratten, 2020; Lago et al., 2022). Sports organizations must be willing to rethink their structures, practices, and stakeholder relationships in ways that align technological capabilities with broader strategic objectives.

VII. IMPLICATIONS

The findings of this study reveal that digital transformation generates far-reaching implications for the sports ecosystem, reshaping management practices, redefining the role of journalists, and altering the nature of relationships between organizations and fans. These implications extend beyond the technical adoption of new tools and encompass strategic, professional, and cultural dimensions.

Implications for Sports Management

The integration of digital tools such as CRM systems, big data analytics, and streaming platforms has rendered decision-making processes more agile and evidence-based. These technologies strengthen the ability of sports organizations to cultivate fan relationships while simultaneously enhancing the overall experience of spectators. The practices of the Hellenic Olympic Committee and Olympiacos, for example, demonstrate that strategic investments in digital innovation foster stronger fan loyalty and reinforce global positioning. By cultivating integrated digital ecosystems, sports organizations are able to expand brand visibility, diversify revenue streams, and increase their international reach. In this respect, digital transformation is not simply a support function but a driver of long-term competitiveness.

Implications for Sports Journalism

For sports journalism, the digital era has significantly reduced the traditional role of journalists as intermediaries between organizations and the public. With sports clubs and federations disseminating their own content directly to fans, journalists are now compelled to develop new competencies and professional identities. They must produce multimedia, interactive, and data-informed content while mastering skills in storytelling, analytics, and social media optimization. At the same time, the constant pressure for immediacy in digital environments raises concerns over accuracy and credibility, underscoring the importance of preserving

professional standards in the face of accelerated news cycles. These developments also point to a growing need for journalism education and continuous professional development to integrate digital competencies, preparing future reporters for hybrid roles that combine traditional investigative principles with technological expertise.

Implications for Organization–Fan Relationships

Digital communication has transformed the nature of fan engagement, shifting supporters from passive consumers into active participants within the sporting ecosystem. Through social media, mobile applications, and emerging tools such as fan tokens, organizations now gain access to valuable behavioral data that allows them to design personalized engagement strategies. This shift fosters loyalty and trust, but it also creates new expectations for constant interaction and real-time responsiveness. Fans increasingly demand tailored content, direct communication, and interactive opportunities, which compels organizations to innovate continuously and adapt to evolving expectations. Sustaining these relationships therefore requires not only technical investment but also a cultural commitment to openness, responsiveness, and co-creation.

Theoretical and Practical Consequences

From a theoretical standpoint, the findings validate the shift toward participatory models of communication and highlight the increasing complexity of relationships among organizations, journalists, and fans. They also underscore the value of interdisciplinary approaches that integrate perspectives from management, communication, and technology studies. From a practical perspective, successful digital transformation requires continuous investment in both human capital and infrastructure. Organizations must prioritize training and reskilling while creating specialized roles, such as Chief Digital Officer and Data Analyst, to manage the complexities of digital ecosystems. The establishment of digital key performance indicators (KPIs) is critical for measuring campaign effectiveness, levels of fan engagement, and the commercial impact of innovation strategies. Developing in-house media laboratories can further strengthen autonomy by enabling organizations to produce original content and reduce reliance on external media outlets. Equally important is strategic collaboration with external stakeholders—including technology startups, universities, and industry actors—which can foster knowledge exchange and support the co-creation of innovative solutions. In the field of journalism and education, the results highlight the importance of designing curricula and training programs that integrate sports reporting with data analytics, interactive storytelling, and digital media technologies, thereby equipping professionals with the skills required in the contemporary environment.

Practical Recommendations

Based on these implications, several recommendations can be drawn. Sports organizations should institutionalize digital innovation policies and cultivate a culture of lifelong learning that empowers staff to adapt to emerging technologies. Media professionals must prioritize verification protocols and safeguard journalistic integrity, even under pressure to deliver content with immediacy. Finally, collaborative initiatives between sports organizations, universities, and industry actors should be encouraged, as they can facilitate the exchange of expertise, enhance innovation capacity, and promote the long-term sustainability of digital transformation in sport.

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