



## ORIGINAL ARTICLE

## The Role of Advanced Technologies and Digital Marketing Strategies in Transforming Fan Experiences in Unconventional Sports at Stadiums

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## KEY WORDS

Advanced technologies;  
Digital marketing;  
Fan experience transformation;  
Fans;  
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## ABSTRACT

In recent years, unconventional sports such as e-sports, drone racing, parkour, and extreme adventure sports have become central segments within the sports industry. These sports, with their unique allure for new generations, are reshaping the landscape of the sports industry and necessitating innovative strategies to enhance fan experiences and attract new audiences. By leveraging advanced technologies like Augmented Reality (AR), Virtual Reality (VR), Artificial Intelligence (AI), and the Internet of Things (IoT), alongside digital marketing strategies, engaging and personalized experiences can be created for fans, increasing their loyalty and satisfaction. This article examines how the integration of these technologies and strategies impacts the enhancement of fan experiences and fosters the growth of unconventional sports. To analyze this topic, a mixed research approach was used, which included qualitative and quantitative analyses. Research findings indicate that utilizing these tools contributes to expanding the fan base and promoting the sustainability of these sports on a global scale.

### Introduction

Unconventional sports, recognized for their innovations and specific characteristics, have gained increasing popularity among younger audiences. These sports encompass a variety of activities ranging from e-sports to drone races and parkour. Unlike traditional sports, which primarily emphasize physicality and athletic skills, unconventional sports generally utilize advanced technologies to create new experiences for fans (Miller, 2023).

The combination of these sports with advanced technologies and digital marketing strategies can elevate the fan experience to a new level, promoting greater engagement and attracting new audiences (Johnson, 2023).

A fundamental pillar of success in unconventional

sports is the fan experience. Fans seek not just to watch a game or competition but a rich digital and interactive experience. This type of interaction can include engaging experiences through Augmented Reality (AR) and Virtual Reality (VR), game data analysis using Artificial Intelligence (AI), and real-time performance monitoring through the Internet of Things (IoT) (Gartner, 2022). Therefore, leveraging these technologies in unconventional sports can lead to increased fan satisfaction and growth in the audience base.

### Objectives

-To investigate the role of AR, VR, AI, and IoT in improving fan experiences in unconventional sports at

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stadiums.

- To analyze the impact of digital marketing strategies in increasing awareness, attracting audiences, and engaging fans.
- To evaluate how integrating advanced technologies and digital marketing can boost long-term fan loyalty and satisfaction.

### ***Research questions***

- How can advanced technologies like AR and IoT improve fan experiences at the stadiums of unconventional sports?
- How can digital marketing strategies attract and retain fans?
- What impact does the combination of technologies with marketing strategies have on fan engagement and loyalty?

### ***Hypotheses***

- The use of AR and IoT enhances fan experiences in unconventional sports stadiums.
- Digital marketing strategies leveraging data can attract and retain fans.
- Integrating technologies and marketing strategies increases fan engagement and satisfaction.

### ***Materials and Methods***

To analyze this topic, a mixed research approach was used, which included qualitative and quantitative analyses. Among the methods and tools used are the following:

### ***Case studies***

A detailed examination of unusual sporting events that have successfully implemented advanced technologies and digital marketing strategies, such as drone league

competitions and global e-sports events (Shaw, 2023).

### ***Surveys***

Distributing digital questionnaires to collect fans' opinions and experiences of various unusual sporting events.

### ***Semi-structured interviews***

Conducting interviews with sporting event organizers, digital marketing specialists, and technology experts to gather more in-depth data.

### ***Secondary research***

Using academic sources and industry reports to analyze market trends and technological innovations in unusual sports.

### ***Results***

#### ***Role of Advanced Technologies in Stadiums***

##### ***Augmented Reality (AR) and Virtual Reality (VR)***

Augmented Reality (AR) and Virtual Reality (VR) allow fans to gain unique and novel experiences from sporting events. For example, in esports competitions, AR enables fans to see various information and analyses about the game and players in real-time. This not only makes the viewing experience more interactive but also increases fan awareness and engagement with the event (Baker, 2024). On the other hand, VR allows fans to have an experience similar to being present in the competition arena, giving them the opportunity to view the game from different perspectives.

##### ***Artificial intelligence (AI)***

AI is significantly utilized in data analysis, predicting fan behavior, and optimizing the overall fan experience. For instance, AI can analyze fan behavior and provide personalized content, such as ticket suggestions or products related to events (Miller,

2023). Furthermore, AI plays a vital role in smart event management and demographic data analysis of fans.

### ***Internet of things (IoT)***

IoT technologies provide fans with a seamless and convenient experience. With connected sensors, fans can order food and drinks online, find their seats, and receive real-time information about competitions through wearable devices (Khan, 2024). These technologies greatly enhance fan comfort during events and create a connected and interactive experience.

### ***Impact of digital marketing strategies***

#### ***Use of social media***

Social media plays a crucial role in attracting and retaining fans. Platforms such as Instagram, YouTube, and TikTok are regarded as primary tools for promoting unconventional sports. Engaging influencers on these platforms helps attract new audiences and generate interest among potential fans (Smith & Anderson, 2022).

#### ***Targeted advertising campaigns***

Digital marketing strategies are specifically designed based on data obtained from behavioral analyses and personalized preferences. These campaigns ensure that advertisements reach the intended audience more accurately while creating an engaging experience tailored to their interests. For example, analyzing data collected from previous user interactions allows advertisements and offers to be automatically personalized for each individual (Davenport, 2023).

#### ***Integration of technologies and digital marketing in unconventional sports***

A significant aspect of this research is the simultaneous analysis of advanced technologies and

digital marketing strategies to enhance the fan experience. These two elements can be combined to create a unique and engaging experience for fans of unconventional sports. For example, during esports competitions, fans can experience an immersive environment through VR or AR while engaging with players and other fans through social media and digital campaigns. This synergy contributes to creating a comprehensive and immersive experience that enhances fan loyalty and satisfaction.

Therefore, investing in innovative technologies and digital marketing strategies should be viewed as a comprehensive and simultaneous approach. Utilizing either of them alone may yield positive results in the short term, but integrating both can establish a complete and sustainable digital ecosystem for unconventional sports in the long run (Gartner, 2024).

### **Conclusions**

Unconventional sports, by leveraging advanced technologies and digital marketing strategies, are capable of creating a novel and interactive experience for their fans. Technologies such as Augmented Reality (AR), Virtual Reality (VR), Artificial Intelligence (AI), and the Internet of Things (IoT) have significantly impacted the enhancement of fan experiences and the improvement of their satisfaction both in stadiums and during online events. These technologies not only actively increase fan engagement with events but also play a crucial role in attracting new audiences and retaining existing ones. Digital marketing strategies, utilizing social media, targeted advertising, and personalized digital campaigns, reinforce the fan experience and promote interactions between fans and sports event organizers. Therefore, simultaneous investment in innovative technologies and digital marketing strategies can contribute to the growth and sustainability of unconventional sports, transforming them into a more dynamic industry that transcends geographical boundaries.

**Future research suggestions**

- Investigate the long-term impacts of AR and VR on fan experiences in unconventional sports.
- Analyze the correlation between social media engagement and fan loyalty.
- Study the interplay of various technologies in creating a cohesive fan experience.

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