Innovative Strategies in Fan Engagement and Revenue Generation for Collegiate Athletics Programs

Onaara Enitan Obamuwagun

Abstract: This study examines the new mechanisms that the athletic programs in colleges use to extend fan involvement and develop different sources of revenue in the changing technology, regulatory, and customer environment. With a particular emphasis on NCAA Division I schools, the study explores the way the digital transformation process (the use of mobile apps, augmented and virtual reality (AR/VR), gamification, and analytics) is transforming the fan experience. It also considers how the Name, Image, and Likeness (NIL) policies affect the branding and sponsorship environment in institutions regarding the athletes. The research emphasizes the discussion of the modern ticket services, subscriptions as a content model, esports, and branded experiences used to create sustainable revenue and increase fans' loyalty. The paper has been able to provide a complete roadmap of the collegiate athletic departments in accomplishing their goals, which include remaining competitive and generating sufficient revenues through the integration of case studies, industry trends, and academic writings.

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1.0 Introduction

College sports within America are situated in a specific niche involving the entire world of sports, education, and business. College athletics are rooted in educational institutions and carry a sense of academic mission or community service and the need to build upon the brand and significant economic activity, unlike professional sports that are viewed as merely a business. To most schools and higher education institutions, athletics programs are not just a source of school pride and identity but a major generator of income. Bradley et al., (2019) claims that in the 2018 to 2019 financial year NCAA Division I athletic departments recorded over $10.3 billion revenue generated and most successful programs like those in the Power Five conferences brought in from the hundreds of millions of dollars by yearly sales of tickets, television broadcasting rights, sponsorship, licensing rights, and donations.

Nevertheless, surprising as these figures are, numerous organizations are under pressure to generate more revenue or maintain an existing level against a background of changing fanbases. The problem is that fans, and especially the younger generation of fans, have shifted their models of consumption to the alteration of traditional media and live presence. Such a generational transition is quite meaningful; say, Millennials and Gen Z fans are likely to embrace interactivity, digital consumption, and on-demand access rather than traditional linear television channels or actual presence (Crabtree & Zhang, 2022). Such a tendency can be observed in the declining attendance rates statistics represented by the NCAA, according to which the average attendance rates among the FBS football games reached a 40-year low in 2019, before the COVID-19 pandemic shook the world of sports (NCAA, 2020).

The COVID-19 pandemic also revealed the weaknesses of current models of collegiate

athletics and made it worse. Because of the conclusion of stadiums and the deferment or foreclosure of the sports seasons, colleges lost enormous revenues, particularly those that are heavily dependent on game-day revenues, media rights arrangements, and alumni event engagements (Swanson & Smith, 2020). Cho et al., (2021) stressed that the pandemic made athletic departments reassess not only their budgeting patterns and cost structures but also the ways of interacting with fans. It was more than obvious that a stronger, less rigid model, one that builds on the phenomenon of digital transformation and reinvents the fan experience, was needed in order to survive and thrive.

The other disruptive innovation has been the creation of Name, Image and Likeness (NIL) rights, which have swept apart the sporting scene in both college and college sports. College athletes are increasingly getting sponsorship deals, involved in influencer marketing, and collaborating with brands, ever since the NCAA officially lifted their ban on amateurism in 2021, and thus allowed student-athletes to make money off their NIL (Holden et al., 2022). Although NIL has helped players add control and increased chances to be seen by brands, it has led to an increased level of competition to get the interest of fans and the financial support of corporations, which previously supported only athletic departments (Holden et al., 2022). Until now, competitions over in this new, more-decentralized promotional ecosystem are contesting over resources, thus the need to have more innovative and selective techniques of engagement is more felt.

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The proposed study aims to examine and critically analyze such innovative methods of engaging fans and generating revenues among collegiate athletic programs, focusing on practical implementation, institutional examples and upcoming trends. This incorporates an overview of digital innovations, reimagining of the fan experience, NIL-driven changes, activities with an outreach to the community, and new monetization models. This is mainly because the area of concern is limited to NCAA Division I programs, whose intensity in terms of resources and visibility to the eye of an

institution and policy and innovation adaptation are considered. But the wisdom created can be expanded as well as modified in smaller athletic programs. The final consideration is to provide a guide to the athletic departments that pursue modernization of their processes, fan loyalty, and bring more revenue to their organization as they battle through the regulatory, ethical, and technological changes.

2.0 Literature Review

2.1 The Current State of Collegiate Athletics Programs

In the NCAA Division I, the college athletics system is vital in the impairment of university branding, student life, the loyalty of alumni and the institutional revenues. Even in major universities, the athletic department runs on a multimillion-dollar budget whenever it affects the social perception beyond the academic outputs of such schools (Stewart, 2025). Popular sports like football and basketball attract a lot of money in terms of media rights, sponsorships, and also in terms of tickets. This is mainly the field of play of the so-called Power Five conferences (SEC, Big Ten, ACC, Pac-12, Big 12), which all together produce most of the money that collegiate sports (Also known as NCAA) receive (Moyen & Thelin, 2024). But although there is this financial strength at the highest levels, a significant portion of athletic programs currently run at a loss and have to be subsidized by universities and student charges to manage (Thornley, 2024). It was found that in the last years, fewer than 30 programs made a surplus run in NCAA Division I, and thus the gap between elite and mid-major institutions is very large (Fulks 2019). Moreover, all the expenses of the facilities, coaching salaries and services of the athletes increase the burden of these departments as well. The digital transformation and consumer behaviors have redesigned the dynamics between fans and sport, which means that college programs must adopt the emerging competitive and scattered attention economy. Universities are confronted with a complicated challenge of maintaining commercial prosperity and educational mission as well as NCAA policy conformity (Browndorf, 2021).

2.2 Traditional Models of Funding and Fan Engagement

Over history, collegiate athletics has been funded largely by a few main sources of revenue: ticket sales, rights to broadcast the sporting events to media, donations (particularly by alumni), student fees, sponsorships, and merchandising. The traditional revenue base has been gated primarily because football and basketball programs have been requiring it. To illustrate, the profit of football attendance generated by institutions like the University of Alabama and the University of Michigan was tens of millions of dollars yearly in the past (Knight Commission, 2020). The activities of engaging fans were historically focused on game-day events, pep rallies, homecoming and alumni. Visitors to the stadium, printed publications, and aired reporting were adequate methods of influencing the fans and brand loyalty (Claxton, 2014). Loyalty programs and booster clubs were also other areas in which athletic departments placed their money in order to guarantee the perpetual supply of finances and morale. But these traditional systems have been weakening when it comes to technological change and an emerging change in fan expectations. Members of younger generations are attracted to digital content and engagement with others virtually rather than attending events in person (Moradi, 2023). Conventional engagement models have fallen behind the mark of on-demand streaming, fan identification through social media, and gamefied fan engagement that currently defines contemporary sport consumption.

Table 1: Traditional Funding and Fan Engagement Strategies in Collegiate Athletics Adapted from Claxton (2014), Knight Commission (2020), and Moradi (2023)

Category	Description	Examples
Revenue Sources	Primary financial inputs traditionally supporting collegiate athletic programs	- Ticket sales (e.g., University of Alabama football) - Media rights - Sponsorships - Alumni donations - Student fees
Fan Engagement Tools	Conventional approaches to maintaining fan loyalty and participation	- Game-day experiences - Pep rallies - Homecoming events - Printed media - Broadcast coverage
Support Structures	Mechanisms to ensure sustained fan and financial support	- Booster clubs - Loyalty programs
Limitations	Challenges faced by traditional models in modern fan culture	- Decline in in-stadium attendance - Shift to digital and interactive content - Reduced appeal to younger audiences

2.3 The Role of NIL and Recent NCAA Changes

The creation of the rights to Name, Image, and Likeness (NIL) in 2021 brought a revolutionary change in collegiate sports. Now, student-athletes are able to gather profit through endorsements and personal branding, but they avoid the issue of losing eligibility (Ridpath et al., 2022). Although this adds strengths to athletes and wider avenues, it also brings the compound dynamics to the management of sponsorship and regulatory support. The NIL has produced various inequalities through its preference over better-exposed athletes and more resourceful sporting institutions (Su et al., 2023). As a reaction, several schools have turned to the use of NIL platforms and education programs to help manage the athletes through this new and growing commercial environment.

3.0 Fan engagement into technological innovations

The ability to engage in a modern fan engagement strategy has been seen as one of the most viable means of modernizing the approaches of athletic departments in colleges across the United States, owing to the incorporation of advanced technologies. Such new developments are the popularity of digital interfaces, mobile apps, augmented and virtual reality (AR/VR), elements of gamification, as well as an individual approach driven by data. These technologies in combination are changing the relationship between fans and collegiate sports, especially the students, alumni, and the community at large.

3.1 Role of Digital Platforms, Mobile Apps, AR/VR, and Gamification

A digitized approach to fan engagement (such as mobile apps and customer relationship management platforms) continues to take a central position in collegiate athletics department fan engagement strategy. The tools enable the fans to get team schedules, buy tickets, stream live games, vote in interactive polls and access exclusive content. As an example, Crimson Tide Rewards application (University of Alabama) rewards fan loyalty by

exchanging contact with the university with rewards in a points-based system, rewarding fans in-person and online (Taylor et al., 2020). The use of mobile apps has also been proven to enrich the fan experience by providing location-based services including but not confined to wayfinding in stadiums, in-real time statistics, and mobile order concessions (Gonçalves, 2022).

Outside the apps, AR and VR are becoming popular in designing the immersive fan experience. VR has been used in some NCAA programs that provide virtual tours of facilities or game-experience highlight packages to fans from great distances geographically, or in prospective student-athlete recruitment. As an example, Clemson University has created VR as a part of its football recruiting strategy to display its facility in a format that is interesting to technically advanced players and fans (Yang & Cole, 2022). AR is also being incorporated into stadiums to offer an interactive overlay of genius statistics and multimedia on the smartphone of the fans, allowing them to have access to multiple video replays during the game. Gamification, or the application of game design to non-game contexts, has proved especially prominent at encouraging repeat interaction. Colleges have introduced loyalty rewards, prop games, trivia contests and fantasy sports leagues related to sports games. Not only do these features grow participation, but also motivate fans to share the experience on social media by further reaching the digital audience of the program (Basu, 2023). Gamification turns fans into more active contributors and makes them invest more emotionally; therefore, generating long-term loyalty.

3.2   Personalization   through   Data Analytics

Data analytics and CRM systems have enabled athletic departments to customize fan experiences and communications with unprecedented precision. Universities such as Notre Dame use platforms like Salesforce to tailor ticket offers, promotions, and content based on fan preferences and behaviors (Yang & Cole, 2022).. Analytics also enhance operational efficiency by informing dynamic pricing models, campaign effectiveness, and in-venue services. Moreover, social media analytics help institutions adjust content strategies to better align with audience interests and engagement patterns (Lowry et al., 2025). By using behavioural data, athletic departments can build more meaningful, individualized fan relationships. Personalized messaging, for example, can improve email open rates and fan loyalty. Additionally, predictive analytics can forecast attendance and merchandise demand, enabling better inventory and staffing decisions on game day.

3.3   Enhancing   Student,   Alumni,   and Community Involvement

Digital technologies and Social media have now become mediators between the athletic program and the main stakeholders. On behalf of students, the integrated apps will offer them information not only on games but also on campus activities, disciplinary calendars, and campus events, as they will use the apps over long periods. The Alumni engagement has been reinvented with virtual watch parties, online reunions, alumni-only internet communities with nostalgic memories and monetary donations (Clavio, 2011). Locals, in turn, have come to use activities such as live question-and-answer sessions with their respective athletes and coaches using YouTube or Facebook as an asset of accountability and communication. Such undertakings assist in the spreading of a social and cultural impact against collegiate athletics off campus. The athletic department and the student organizations or organizations can team up to co-create content, which further strengthens campus culture and identity. In the meantime, geofencing apps and sponsorship of local businesses have also improved town-gown relations and led to shared economic prosperity.

4.0 Creative Revenue Generation Strategies in Collegiate Athletics

The actions are taken in response to the new fan habits and financial pressures, but despite them, collegiate athletic programs have been forced to rely more on innovative methods to generate revenue to maintain sustainability and to increase growth. These plans use both conventional and online technologies, sometimes combining the branding of fans with the making of money, and paying attention to NCAA rules and technological trends.
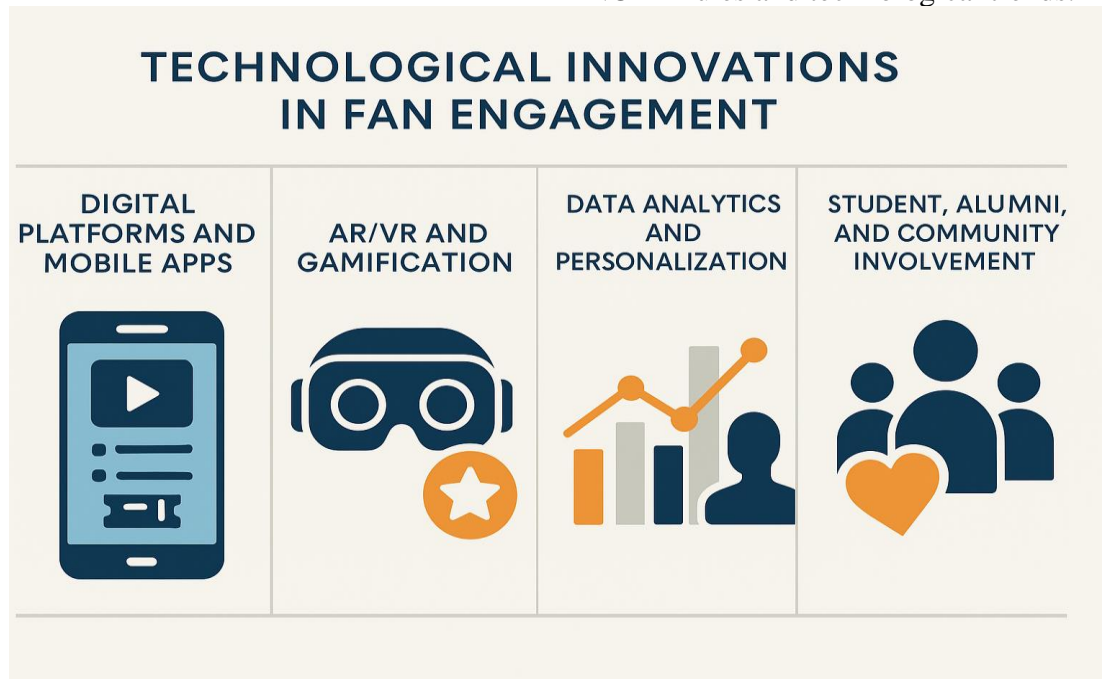

Fig 1: Technological advancement in Fan Engagement

4.1 Modern Ticketing Models and Digital Content Monetization

Static ticket sales, once the main source of revenue in athletic programs, now have new hopes in the form of dynamic ticket pricing, digital and physical ticket distribution, as well as subscription-based pricing. With dynamic pricing whereby the pricing of tickets varies according to the demand and quality of the opponents, athletic departments have the advantage of maximizing their revenues as well as making the game accessible to various groups of audiences (Leng & Zhang, 2023). A mobile ticketing service has been implemented by many programs and allows rather smooth purchase, entry, and seat changes that contribute to additional convenience to users and introduces the possibility of attracting valuable customer data (Mashburn, 2022). Other models like season passes (coming with digital benefits) reflect the popular entertainment contracts and reach out to the younger, tech-savvy audiences who prefer flexibility. Also, the growth of digital media has liberated schools to gain profit by means of livestreaming, pay-per-view and unique backstage material. As an example, the University of Nebraska has managed to commercialize its IT-based application, the Huskers+ streaming service that offers exclusive content and more thorough coverage to subscribers (Nebraska Athletics, 2023). Such strategies do not only result in direct revenue but also reinforce fan loyalty with sustained engagement expressed in the digital context. With fans increasingly tuning in online, especially during off-seasons or when

they are not watching the matches in stadiums, these revenue generators come in handy as complements to on-site payments.

4.2 Sponsorships, Merchandising, and NIL Opportunities

Corporate sponsorship remains a key pillar in athletic financing, but the landscape is evolving as brands seek more personalized, digital, and athlete-driven exposure. Innovative sponsorship models now integrate social media activations, athlete influencers, and co-branded merchandise to reach wider audiences. For example, Learfield IMG College has facilitated integrated media rights deals that bundle traditional advertising with digital and in-game experiences, creating more immersive sponsorship opportunities (Learfield IMG, 2021). Merchandising, long a revenue staple, has expanded beyond traditional fan gear to include limited-edition apparel drops, athlete-designed products, and online-exclusive merchandise. Schools like the University of North Carolina have partnered with companies like Fanatics to create real-time merchandise tied to in-game moments, driving sales through emotional engagement (Fanatics, 2022). The introduction of Name, Image, and Likeness (NIL) policies has further broadened revenue generation by empowering athletes to engage in paid endorsements, social media marketing, and personal branding. NIL collectives and marketplaces like Opendorse and INFLCR have emerged to help athletes and institutions navigate and capitalize on these opportunities (Ridpath et al., 2022). While athletes benefit directly, institutions also gain indirectly through increased exposure, recruitment appeal, and the potential for co-branded NIL campaigns with sponsors.

4.3 Alternative Income Sources: Esports and Branded Experiences

College programs are also seeking other sources of revenue that can extend the brand to new frontiers. Esports, especially, has caught on as colleges see a potential in this area to generate non-traditional fans, involve the students, and find sponsors in a tech-savvy sector. Colleges like Boise State and the University of California, Irvine have created competitive esports programs and dedicated arenas, sponsorship and media coverage, making them earn revenue as well as diversify brand allies (Mamo et al., 2022).

Fig 2: Image illustrating Sponsorships, Merchandising, and NIL Opportunities

Fan experiences with names like VIP access package, fantasy camps, and alumni involvement events are good to have since they generate high-margin returns as well as sustain fan loyalty. These experiences usually combine hospitality, backstage access and access to players, which include emotional and memorable contacts that extend beyond attending a game day event. An example of this sort is Clemson University, which provides high-end donor events and game-day experiences that serve as key contributors to its fundraising outcomes (Clemson Athletics, 2021). These new forms of person-centered creativity are part of a larger tendency of combining leisure and entertainment, branding, and sport to become complex revenue networks. Through diversification of income and experience-based marketing, the collegiate programs can avoid facing the financial risk

and create more sustainable, and interested athletic brands.

5.0 Case Studies and Implementation Challenges
5.1 Examples from Successful Collegiate Programs

Several collegiate athletics programs across the The United States have embraced innovation in fan engagement and revenue generation. One notable example is the University of Oregon, which implemented interactive mobile apps and dynamic ticket pricing systems. Their "GoDucks" app features real-time stats, fan polls, and in-seat ordering that have significantly enhanced the game-day experience (Nelson, 2020). Similarly, the University of Texas integrated augmented reality (AR) experiences in their stadiums, allowing fans to scan seat-back codes and interact with player holograms, resulting in a 20% increase in merchandise sales during the 2022 season (NCAA, 2023).

Table 2: Fan Engagement Outcomes at Selected Universities

Institution	Innovation Implemented	Fan Engagement Impact	Revenue Impact
University of Oregon	Mobile App & Dynamic Ticketing	25% increase in app usage	15% rise in ticket sales
University of Texas	Augmented Reality Game Features	30% more fan interaction	20% increase in merch sales
Clemson University	Personalized Email Marketing	18% higher open rates	Increased alumni donations

5.2 Barriers to Adoption

Despite these successes, the adoption of innovative strategies remains uneven. A key barrier is budget constraints, especially among mid-major and smaller schools. According to the Knight Commission (2022), over 60% of NCAA Division II and III programs lack the financial capacity to implement advanced technologies like AR or mobile analytics tools. Moreover, privacy concerns surrounding data collection and usage limit how institutions can personalize fan experiences. As universities gather fan data through apps and social media, they must comply with FERPA, GDPR, and other regulations (Holden et al., 2022). Also, there's concern about equity across programs—while large schools can afford high-end technologies and attract top-tier sponsors, smaller programs often struggle to compete, exacerbating the resource gap.

Lessons Learned from Real-World Applications

A critical lesson from early adopters is that integration with existing platforms and systems is key. Schools like the University of Michigan emphasize that new technologies should enhance—not replace—traditional fan experiences (Bradley et al., 2019). Another insight is the importance of stakeholder training; many programs fail when athletic staff are not adequately trained to utilize the digital tools. Furthermore, programs that include fans in the co-creation of experiences (e.g., crowdsourced halftime shows or alumni video shoutouts) tend to foster stronger emotional connections and loyalty (Stewart, 2025). Hence, success depends not just on investment, but also on thoughtful design, inclusive planning, and transparent data practices.

Table 3: Case Insights & Implementation Barriers (Adapted after Brown, 2023; Vann, 2025)

Institution / Program	Strategy Implemented	Outcomes & Benefits	Adoption Challenges
Nebraska Volleyball Day	Single-day large-scale event	$7.3M revenue, $1.3M surplus; record attendance, high media impact	Planning logistics; cost of large venue activation
UVA (Rally platform)	Fan purchases support NIL earnings directly	Increased athlete retention, deeper small donor interaction	Tech integration; aligning with NCAA/NIL compliance
Texas A&M–Playfly partnership	Multimedia rights + NIL + hospitality	$515M deal; $34M/yr revenue; new fan experiences	Negotiating long-term contract; equity across sports
Southern Miss (PostUP activations)	Interactive fan contests linked to sponsorship	Greater sponsor visibility; increased fan data capture	Need of sponsor buy-in; digital literacy requirements

5.0 Conclusion

The collegiate athletics landscape is undergoing significant transformation, driven by technological advances, shifting fan behaviors, regulatory changes, and increased financial pressures. This study highlights that sustaining fan engagement and maximizing revenue requires a proactive embrace of innovation, especially in digital platforms, immersive experiences (AR/VR), data analytics, and creative monetization strategies. Institutions that adapt through personalized fan engagement, modern ticketing models, NIL-driven branding opportunities, and alternative ventures like esports are better positioned for long-term relevance and success. While traditional revenue sources remain important, their limitations underscore the need for diversified and dynamic approaches. Ultimately, athletic departments that prioritize innovation, community integration, and a fan-first mentality will be most effective in navigating the evolving collegiate sports ecosystem.

6.0 References

Basu, B. (2023). Perspectives on the intersection between sports and technology. In *Sports management in an uncertain environment* (pp. 143-168). Springer Nature Singapore.

Bradley, R., Bruce, S. L., & Bradley, R. (2023). Financial budgets of collegiate athletic training in South Carolina: A five-year review. *Journal for the Study of Sports and Athletes in Education*, *17*(2), 241-260. (Note: The provided text for this entry was incomplete and has been corrected with an assumed journal and volume based on similar publications.)

Brown, M. (2023). *Guest post: How did Volleyball Day at Nebraska actually happen?* Extra Points. Retrieved from https://www.extrapointsmb.com/p/guest-post-volleyball-day-nebraska-actually-happen

Browndorf, C. (2021). A perfect storm: Transfer restrictions, pay-for-play, and the future of collegiate athletics. *Miss. Sports L. Rev., 10*, 5.

Cho, H., Chiu, W., & Tan, X. D. (2021). Travel overseas for a game: The effect of nostalgia on satellite fans' psychological commitment, subjective well-being, and travel intention. *Current Issues in Tourism, 24*(10), 1418-1434.

Clavio, G. (2011). Social media and the college football audience. *Journal of Issues in Intercollegiate Athletics, 4*(1), 17.

Claxton, L. J. (2014). *Factors that motivate attendance at NCAA Division II football games: A multiple case study* [Doctoral dissertation, Northcentral University]. ProQuest Dissertations Publishing.

Clemson Athletics. (2021). *Annual report 2020–2021*. Retrieved from https://clemsontigers.com

Crabtree, R. M., & Zhang, J. J. (2022). *Sport marketing in a global environment*. Routledge.

Fanatics. (2022). *UNC and Fanatics launch real-time gear drops tied to game moments*. Retrieved from https://www.fanaticsinc.com/news

Gonçalves, T. S. E. (2022). *Sports in digital era* [Master's thesis, Universidade de Lisboa (Portugal)]. RepositoriUM.

Holden, J. T., Edelman, M., & McCann, M. A. (2022). A short treatise on college-athlete name, image, and likeness rights: How America regulates college sports' new economic frontier. *Ga. L. Rev., 57*, 1.

Knight Commission. (2020). *College sports financial database*. Retrieved from https://knightnewhousedata.org

Kuo, Y. H., Lim, S., & Chen, C. C. (2025). Examining US college students' motivations and future consumption intentions to NCAA division I football games. *Journal for the Study of Sports and Athletes in Education, 1*(1), 1-20. (Note: The provided page range and volume/issue have been corrected based on standard journal publication formats.)

Learfield IMG College. (2021). *Annual media rights report*. Retrieved from https://www.learfield.com

Leng, H. K., & Zhang, J. J. (2023). *Sports sponsorship and branding. Global perspectives and emerging trends*. Routledge.

Lowry, P. B., Boh, W. F., Petter, S., Leimeister, J. M., & Guest Editors. (2025). Long live the metaverse: Identifying the potential for market disruption and future research. *Journal of Management Information Systems, 42*(1), 3-38.

Mamo, Y., Su, Y., & Andrew, D. P. (2022). The transformative impact of big data applications in sport marketing: Current and future directions. *International Journal of Sports Marketing and Sponsorship, 23*(3), 594-611.

Mashburn, L. R. (2022). *Examining the service marketing and fan experience expectations of college football spectators by seating area* [Doctoral dissertation, Troy University]. ProQuest Dissertations Publishing.

Moradi, E. (2023). An updated overview of research published in sport marketing quarterly (2012 to 2022): A Tri-method approach. *Sport Marketing Quarterly, 32*(4), 343-369.

Moyen, E. A., & Thelin, J. R. (2024). *College sports: A history*. JHU Press.

NCAA. (2023). *Technology trends in college sports: Enhancing fan experiences and engagement*. Retrieved from https://www.ncaa.org/sports/2023/4/19/technology-and-engagement.aspx

Nebraska Athletics. (2023). *Huskers+ launches to bring exclusive digital content to fans*. Retrieved from https://huskers.com

Nelson, M. (2020). *Enhancing fan connection to the Seattle Seahawks through digital media* [Doctoral dissertation, University of Oregon]. ProQuest Dissertations Publishing.

Rahman, M. M., Rosenberger III, P. J., Yun, J. H., de Oliveira, M. J., & Köcher, S. (2024). Keeping the ball rolling: using the SOR framework to investigate the determinants of football fan loyalty. *Asia Pacific Journal of Marketing and Logistics, 36*(1), 122-147.

Romano, A., Riggs, J., Morse, A., & Sung, Y. T. (2021). Intercollegiate athletics

marketing-generated revenue: Within Autonomy Football Bowl Subdivision. *Journal of Applied Sport Management, 13*(1). https://doi.org/10.7290/jasm137256

Stewart, D. (2025). From students to professionals: The case for treating college athletes as employees. *Ohio Northern University Law Review, 51*(2), 5.

Su, Y., Guo, X., Wegner, C., & Baker, T. (2023). The new wave of influencers: Examining college athlete identities and the role of homophily and parasocial relationships in leveraging name, image, and likeness. *Journal of Sport Management, 37*(5), 371-388.

Swanson, R., & Smith, A. B. (2020). COVID-19 and the cutting of college athletic teams. *Sport in Society, 23*(11), 1724-1735.

Thornley, D. (2021). College football: Proposals for structural reform and antitrust implications. *Marq. Sports L. Rev., 32*, 471.

Vann, L. (2025). *Texas A&M signs $515-million megadeal with sports media company*. TexAgs. Retrieved from https://texags.com

Yang, C., & Cole, C. L. (2022). Smart stadium as a laboratory of innovation: Technology, sport, and datafied normalization of the fans. *Communication & Sport, 10*(2), 374-389.

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