

# The Integration of Entrepreneurship, Marketing, Sports Analytics on Athletes

Sachin Keshaav

Frisco Memorial High School

## ABSTRACT

The sports business world has changed in recent times as there is new technology that has changed the marketing platform. Social media has played a big part with athletes marketing themselves to be potential brand ambassadors to promote other brands. With the recent introduction of NIL, college and even high school athletes are able to benefit off of their Name, Image and Likeness. This new concept has had a great impact on the sports world as it has changed the market and its trajectory, athletes are projected to leverage higher profit off of their brand as companies all across the world seek for athletes to help advertise their company. This new growth in the sports world has also subsequently left prominent effects on sports tournaments like the Olympics. The Sydney Olympic Games are projected to have a 6.4 billion dollar impact on the economy. On top of these positive impact on athletes and their sponsors, the emergence of sports teams and tournaments have also led to higher foreign investments, higher ROI and economic development across industries.

## **Introduction**

Over the recent years of rapid growth and modern progression within the sports industry, the introduction of novel technological platforms has enabled the sports market to grow from \$486.61 billion in 2022 to a predicted growth of \$512.14 billion in 2023. In order to identify growth within the sports industry, it is imperative to consider marketing and business management strategies that have led to an increased traction of major sports teams, the importance of sports sponsorships that correlate with a higher brand image of professional teams, the market and business trends within sports tournaments and the industry, in addition to new analytic tools that have enabled kinesiologists to analyze these findings. In this research publication, many of these factors – entailing market trends, business and management trends, technological and analytical tools will be assessed to decipher how the market will be predicted to grow over the upcoming years.

## **Digital and Social Media Marketing Interventions for Sports Athletes**

Now that the NCAA has allowed athletes to use their name, image and likeness to be able to promote themselves; athletes can now use social media to promote themselves or other brands that decide they want to partner with the athlete. This also includes professional athletes all across the world as they have always had the ability to brand themselves with social media. But now with the amount of people who use social media on an everyday basis it is now easier to market themselves to show they are big market athletes. For example, 95 soccer players in Europe were tested and it shows that they sports performance and social media activity correlate and you need both to have a high market value.(Korzynski, 2016) Another example of these athletes using social media to gain market value is athletes such as Floyd Mayweather, Cristiano Ronaldo and Kobe Bryant as they were all mentioned in the top 5 highest paid athletes on Forbes list. All of these athletes have over 20 million followers on Instagram. When reviewing findings and outcome of the 2012 London Olympics, the case study uncovered how effective the management of innovations

through social media marketing tools was, through reviewing and analyzing the efficacy of Olympic games and Paralympic games, which demonstrated how SMM strategies had a predominant role in the marketing sector for elite athletes.

One of the major findings was that the athletes were not utilizing Twitter as a potential marketing tool, and the author stated that athletes could use Twitter as a means by which to promote their sponsors' products. Similar findings and recommendations were made by other scholars in later examinations of athletes' social media content. Burch and colleagues studied Olympic athlete tweets in 2014 and acknowledged that these athletes might experience heightened financial opportunities throughout their careers (e.g., sponsorships and endorsements) in pursuit of lucrative opportunities for athletes.

## **Sports Sponsorships and Correlation with Brand Image and Performance**

Over the course of years, with the growth of the space of online marketing tools and sponsorships with established brands, sports teams have been able to increase the traction and grasp recognition from media, fans and the attention of other athletes. Specifically, sponsorships can be a key source of income for both sports teams and athletes. Sponsorships can start from local grassroots programs and go all the way to professional teams, this can include perks as small as free shoes all the way to perks such as free flights and hotels when traveling. Usually when a team is sponsored, they will represent the brand while in competition and when they are successful clients will see them wearing that brand and will be persuaded to go with that brand. For example in 1994 Mccarville and Copeland describe sponsorship as a relationship in which a sponsor exchanges resources with an individual, cause or event where sponsors expect that this exchange will yield a return on investment. (Lamont, 2011) An example of an athlete representing a brand is LeBron James as he has a billion-dollar lifetime deal with Nike where in exchange he wears all of Nike equipment in all of his competitions so that Nike sales can benefit. Another example of an athlete who uses sponsorships is Stephen Curry as he has a deal with Under Armour where he makes over 30 million dollars per year where in exchange, he contributes to most of Under Armour's sales in the Basketball Department. To conclude Sports Sponsorships are a huge part of athletes and team's revenues they represent these companies in numerous ways and are able to successfully obtain economic compensation in conjunction with higher traction and rewards.

## **Current and Future Sports Progression and Trends**

Researchers have estimated that the size of the global sports industry in 2014 was US \$600-700 million, which constitutes roughly 1% of the overall GDP of the nation. (Kearney, 2014) Notably, it has been seen that the sports industry has been outperforming the GDP of most nations. (AU, 2017) When a global consulting business analyzed the progression of growth in the global sports industry, researchers uncovered that bull markets for sports were in Asia, South America and Africa — areas where the industry expectations for sports have been predicted to continue progressing. With the impact of globalization and the world shifting towards globalization 2.0, there has been a subsequent rise of sports business in addition to commercialization of major sporting events. Thus, with this progression, entrepreneurs have been paying special and intricate attention on how various sports businesses can grow in order to generate higher revenue. (Westerbeek et al., 2022) Furthermore, as a result of technological advancements that have enabled digital technologies to allow more sports businesses to reach a higher traction, the results have been impeccable — with the increase of more targeted ads, corporate partners and sponsors, and an emergence of more immersive and interactive sports events and experiences. (Westerbeek et al., 2022) Furthermore, the innovation theory bolsters the idea that across a multitude of industries, innovation has been the core of leading to the development and applications of new technological platforms that can allow more entrepreneurs to create opportunities for investment, growth and employment in the sports context. This is increasingly prevalent in the modern era, where sports organizations today have diversified their means of revenue through searching beyond traditional money-making opportunities and looking into

other sources of income in sports, media and entertainment that could help add traction and diversification to emerging sports markets.

## **Economic and Business Impacts of Sports Tournaments**

Researchers who have published findings regarding sports tourism have predicted the impact of how a major sports event – with the traction of higher event attendees, can lead to positive economic impacts on the nation directly. In a particular research conducted in the state of South Carolina, primary data collection was utilized to assess the positive economic impact as a result of the government maximizing the effectiveness of sports initiatives and events. (Daniels, 2003) In a particular analysis of the effectiveness of the Olympic Games specifically with Summer, Winter and Paralympics, findings exemplified how conducting these sports events have led to a higher economic growth by leading to an increase in revenue for the city’s restaurants, hotels, and other businesses. In other sports events, the Sydney Olympic Game was predicted to generate a \$6.3 billion impact on the economy, in conjunction with creating over 100,000 new jobs. For the World Cup that was conducted in the United States in 1994, there was a predicted boost of \$4 billion to the US economy in conjunction with a relatively high percentage increase in the nation’s GDP. (Barclay, 2009) In addition to the accommodation of athletes and fans, hosting Olympic events have also led to a high improvement in the infrastructure development, increased and accessibility trade, foreign investment and tourism that all entail positive economic benefits and impact. (Baade et al., 2016) In the 2000’s, the IOC launched a project to examine the economic and environmental impact of hosting major sports tournament events called the “Olympic Games Global Impact” (OGGI). From looking at the impact of the Olympic Games in the nation, and reviewing the growth of the nation at an 11-year period, all economic, environmental and social impacts were assessed through the relevant metrics obtained, “optimal measures” were recorded. (Gratton, 2008)

## **Limitations**

There are some limitations as well to Marketing and Sports Brands, such as the limitations of our studies as most of our research we’ve uncovered is between the 1990’s and 2000’s. This could subsequently lead to our data being outdated. Additionally, most of the research analyzed in this publication focuses on data collected from the USA and not global findings; this limits the ways in which these findings can be diversified. Furthermore, it is imperative to note that competitions in lower socio-economic areas such as Africa and countries in Southeast Asia may not be as lucrative and have accessibility to resources as competitions hosted in higher economic groups such as the US, Canada and Europe. Thus, as most of the findings have been generalized it is imperative to consider multiple extraneous factors like socioeconomic standing, infrastructure, facilities and technological accessibility. Another potential limitation is that in this research publication, only certain sports teams have been assessed such as basketball and soccer; in reality, there could be different ways of marketing that can be adapted in other sports such as football and baseball that have not been discussed. While the economic impacts and growth have been measured in this publication by reviewing sponsorships and online marketing platforms, other streams of income have not been accounted for including revenue generated from fanbase, ticket sales, merchandise sales, compensations for winning tournaments, and contracted payments for athletes. Lastly, another limitation is surrounding how top-performing athletes account for the majority of economic and business impacts while the subsequent influence and value of other emerging athletes who are just beginning their careers in sports have yet to be discussed in this specific publication.

## **Sports Analytics Tools**

Over the course of years, we’ve witnessed innovation in technological platforms, Artificial Intelligence, NLP processing tools and data science and mining tools that can be implemented through statistical analyses for kinesiologists

to uncover commonalities and patterns in. (Passfield et al., 2016) Through the applications of big data, algorithms embedded in online platforms, and statistical analyses and tools, researchers are able to see common increases and surges in the sports industry, along with new emerging markets that could be developed upon.

## Wearable Devices, Biometric and Kinematic Data

Sports data utilizes both quantitative and qualitative data from a large-scale by reviewing biometric data, films, historical media reports and tracking data to name a few. (Vermeulen et al., 2018) One example of this is a wearable micro-electronic-mechanical system called the MEM system that can analyze a wide range of biometrics data from physiological sensors and symptoms, kinematic and kinetic data alongside geo-spatial tracking data to track athletes' movement during these sporting activities. (Vermeulen et al., 2018) In addition to this, there are also forms of wearable devices that include pedometer anklets, chest straps, running watches and smart phones that athletes carry with them that can provide a holistic collection of data points that can ensure that athletes' progress is tracked.

A particular researcher looked into the number of workouts that were generated over the course of five months by users that utilized fitness applications. From processing these Global Positioning Systems (GPS) data, research exemplified that the maximum frequency of GPS data generation came out to become 25,000 tuples per second, where these individual data points were collected during the entirety of the training and race sessions.

To assess their global presence, the Cisco Internet Business Solutions Group (IBSG) forecasted growth within the sports business product sector. Specifically, it was evident that the market for wearable devices increased by approximately 7.3%, with almost nearly 27 million devices being shipped out across the country to help support aspiring athletes who rely on healthcare and business services to track their physical performance.

However, while these metrics and data points can be very significant for use by athletes, at the same time, there are increased concerns surrounding data protection and security as hackers may be able to gain access to sensitive personal information after athletes run their run or performance session. An example of this is how the routine, health data points like their heart rate and biomechanics can be revealed through cyber-attacks and malware. Additionally, with the increase in these privacy risks, research showed that approximately 87% of the US population can be identified by their zip code (and residency), gender and birthday – thus, wearable tracking data increases and amplifies this risk of the hazards of risked data security and protection.

## Sports Law (Intellectual Property Rights, Contract Negotiation)

### Impact of the Introduction of NIL on the College Athlete Recruitment Process

With the introduction of NIL in recent years, the recruitment of college athletes has drastically changed. NIL money has completely changed the landscape of recruiting where these colleges can persuade athletes to come to their schools, especially with the transfer portal where now you can play right away when you transfer. So the transfer portal has almost started to look like a free agency market that you would see in professional sports in a way. This results in more college athletes and even high school athletes getting agents to help them market themselves and make the most out of the NIL money that the schools offer them. There are also NIL collectives for colleges that help them manage their funds and distribute them to all the sports. Some of these collectives have partnered to form the Collective Association and the schools that are member of them are Classic City Collective(University of Georgia), Spyre Sports Group (University of Tennessee), The Grove Collective (University of Mississippi), The Battle's End (Florida State University), House of Victory (University of Southern California), Champions Circle (University of Michigan), and Happy Valley United (Penn State University). This Association will be mainly focused on 3 things: To serve as a voice for athletes and their best interests, provide a forum for collectives to discuss current NIL issues and share best practices, and provide a unified voice for collectives to leverage their position.

## Challenges, Empirical Data and Survey Collected from College-Recruited Athletes

In a recent Chronicle survey of 300 current Division I athletes that represented 17 men's and women's teams (not including football) at seven universities in the MidAmerican Conference, they believed they were given a fair representation of the schools they are now attending. Out of 300 athletes that responded to the survey, quantitative and empirical results from the survey showed that 30% of athletes had maintained communication with athletes at least once every two weeks, and more than 60% of athletes responded that the frequency of communication with head and assistant coaches was sufficient for them to understand the process. Also, when looking at the year of commitment, 63% of athletes committed their senior year, 35% committed their junior year and only 2% committed their sophomore year. Another interesting result from the survey is that 2% of the athletes that do official campus visits will only visit once or twice to that respective campus. When making the decision to commit after the school has offered you 85% of athletes said they get at least a week or more to decide, compared to the other 15% who get less than a week to commit.

## Conclusion

Although the combined usage of social media, digital and marketing tools has proved efficient in growing the establishment and traction of athletes in the online space, coupled by its positive economic impacts on the nations hosting these various tournaments, while diversifying these findings, it is also essential to consider many ethical limitations that have arisen as a result. While this research publication has shown a positive correlation between the economic growth of the nation, business management strategies and the growth of emerging sports teams, at the same time, it is essential to consider extraneous factors such as socio-economic factors, varying levels of infrastructure, development, in addition to varying accessibility to facilities can pose limitations on the economic, business and industries within the sports sector. Findings exemplified that with the growth of the sports industry in the upcoming years, researchers could also anticipate witnessing the prevalent usages of technological tools such as wearable devices and other forms of tracking devices that could help athletes better optimize their physical performance. While some of the findings have been adapted from college athletes that participate in division tournaments, it is also essential to consider how a lot of these policies and surveys could be diversified, to also include elderly adults that have less recent years of experience in pursuing sports. In conclusion, there is a positive correlation between the increase in sports teams and athletes and the subsequent business, data traction and economic growth of nations that we could anticipate to see in the upcoming years.

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