



# Innovation and Optimization of Commercialization Path for Professional Sports Clubs: Analysis Based on Successful European Football Cases

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**Abstract.** With the reconstruction of the global sports industry competition pattern, traditional income cannot meet the strategic goals of sustainable development of professional sports clubs. Therefore, professional sports clubs are shifting towards a diversified revenue strategy, breaking through the barriers of traditional professional sports club revenue, and actively exploring new profit paths. This study is based on the European professional football club Real Madrid (2010, 2024) as a case study, analyzing how it breaks through traditional income barriers and innovates and optimizes in diversified business paths, providing reference for the commercialization development of other professional sports clubs. Research has found that Real Madrid has achieved a qualitative change in its revenue structure through a "three-dimensional collaboration" model. Future professional sports clubs need to build an innovative ecosystem of "technology empowerment data-driven ecological collaboration". This study provides a theoretical framework and practical paradigm for the digital transformation of professional sports clubs, helping them break through the "trap of traditional income".

**Keywords:** Professional sports clubs, Commercialization, Diversified revenue, Innovation and optimization, Real Madrid.

## 1 Introduction

### 1.1 Research Background and Topic

The importance of commercializing professional sports clubs, especially in the context of increasingly fierce competition in the global sports market and industrial transformation brought about by digital technology, the limitations of traditional revenue models, and the challenges faced by clubs. The commercialization of professional sports clubs is the core driving force for the development of the sports industry. Nowadays, with the increasingly fierce competition in the global sports market and the industrial transformation caused by emerging digital technologies, traditional sources of income

are no longer sufficient to meet the sustainable development of clubs. This trend indicates that clubs urgently need to explore new growth points through technological innovation and fan economy. This study focuses on the commercial transformation practice of Real Madrid Club (2010, 2024), exploring how it achieves a qualitative change in revenue structure through technological innovation and strategic optimization, and provides a digital transformation paradigm for professional sports clubs.

## **1.2 Research Objectives and Significance**

The purpose of this study is to analyze the innovation and optimization of the commercialization path of professional sports clubs, especially from the aspects of revenue model, brand building, fan economy, sponsorship cooperation, etc., combined with successful cases of European football professional clubs for analysis. Research significance: Elaborate on how the innovation of these commercialization paths can help clubs achieve sustainable development, especially how to optimize the club's commercialization model through emerging strategies such as digital transformation and fan economy.

## **1.3 Research Methods and Data Basis**

Using quantitative analysis method, a revenue structure evolution model was constructed through Real Madrid Club's financial report (2010/2024) and Statista industry database. Comparing its 2010 (total revenue of 442 million euros) and 2024 (1.0445 billion euros) data, it is found that the proportion of commercial revenue has jumped from 30.6% to 46.1%, while the proportion of broadcasting revenue has decreased from 42.5% to 30.2%, verifying the effectiveness of diversified revenue transformation. Case study combined with bibliometric method to systematically analyze the collaborative mechanism of brand building, fan operation, and technology application.

## **1.4 Core Discovery and Innovation Framework**

Real Madrid achieves commercialization breakthrough through the "three-dimensional collaboration" model: driven by brand value: relying on the superstar effect (annual jersey sales exceeding 3 million pieces) and globalization strategy, building top sponsorship networks such as Adidas and LV, commercial revenue has grown by 257% in 14 years; Technology Empowerment Scenario: Investing 360 million euros to renovate the Bernabeu Smart Stadium, expanding revenue channels through nonevent activities such as concerts (generating 9.1 million euros per event) and virtual viewing; Deepening the fan economy: Establishing a super membership system and NFT digital collection sales, using social media content marketing to enhance user stickiness, VIP members spend an average of over 2000 euros per year [1].

## **1.5 Current Status of Commercialization Path for Professional Sports Clubs**

Many professional sports clubs have a single source of income and overly rely on sponsorship and broadcasting rights. Insufficient commercialization potential, lack of innovation in peripheral product development, insufficient exploration of cultural attributes, and insufficient formation of sustained consumer stickiness. Too many professional sports clubs have homogenized brand building, lack differentiated competitiveness, lack clear values and cultural positioning, and rely on star players and short-term marketing to establish long-term brand loyalty. When pursuing a globalized market, it is possible to overlook the culture and local policies of local fans, resulting in weak community connections and causing clubs to be "out of place". Unable to effectively handle the conflict between fan experience and commercialization, high ticket prices, membership requirements, and other factors have caused dissatisfaction among fans. For emerging technologies, the application of data and technology lags behind, the digital transformation of clubs is slow, and the application scenarios of technology are limited. These challenges and shortcomings are major difficulties that currently plague the commercial development of professional sports clubs.

## **2 Literature Review**

### **2.1 Innovation of Income Models**

Breaking through traditional income dependence, the limitations of traditional income force clubs to explore new diversified profit models. For example, European football clubs balance their finances and fan rights through a "membership+capitalization" model (such as Barcelona's membership reform). Innovation in club brand management, such as the Barcelona Museum of FC Barcelona, which has become an important asset for persuading and motivating PTSO fans as well as sports related foundation sponsors [2].

### **2.2 Brand Building and Digital Marketing**

Social media and digital tools have reshaped the way clubs interact with consumers. Research has shown that clubs can significantly increase brand stickiness by posting behind the scenes videos of games and player interactions through social media platforms such as Instagram and TikTok. English Premier League club Manchester City collaborates with Sony to develop a metaverse fan community, providing virtual viewing experiences and becoming a classic case of digital transformation [3].

### **2.3 Fan Economy and Community Operations**

Fans are regarded as the core asset for the commercialization of clubs. The literature points out that by constructing a "super membership system" (such as Real Madrid VIP membership benefits), social media and virtual experiences can enhance fan loyalty [4].

In addition, there are various applications in the sports industry through blockchain, NFT, and financial technology, which have the potential to open up new monetization avenues and empower athletes and fans to participate [5].

## 2.4 Sponsorship Cooperation and Cross border Linkage

Collaboration between professional football clubs and sponsors can achieve mutual benefit and win-win results: sponsors gain global brand exposure through jersey advertising, stadium naming, etc., accurately reaching millions of fans; The club receives stable financial support for youth training, signings, and facility upgrades. Both parties can also deepen consumer interaction and expand market share through joint activities and digital marketing. In addition, social responsibility cooperation (such as environmental initiatives and community welfare) can enhance brand reputation, form long-term social value, and ultimately achieve dual growth in commercial benefits and sports influence. The sponsorship model has shifted from single brand naming to scenario based deep cooperation. For example, Bayern Munich has partnered with Deutsche Telekom to develop smart stadium technology, achieving a win-win situation for sponsored brands and user experience [6]. Cross border collaborations (such as AC Milan and fashion brand Off White launching joint jerseys) increase brand premium through cultural breakthroughs [7].

## 3 Case Study: The Income Comparison of Real Madrid Club

Taking the income of Real Madrid Football Club in different time periods as an example to analyze the innovation and optimization of its commercialization path. Real Madrid's total revenue in 2010 was 442 million euros, including match day revenue (about 119 million euros, accounting for 26.9%), broadcasting revenue (about 188 million euros, accounting for 42.5%), and commercial revenue (about 135 million euros, accounting for 30.6%). Among them, traditional game broadcasting revenue accounted for the highest proportion, indicating that at that time, Real Madrid's revenue mostly relied on traditional sources of income. (Data source: Real Madrid's financial report for the 2009-2010 fiscal year). On the other hand, the latest financial report of Real Madrid Football Club in 2024 shows a total revenue of 1.0445 billion euros (breaking through the 1-billion-euro mark for the first time). Among them, competition revenue (248 million euros, accounting for 23.7%), broadcasting revenue (316 million euros, accounting for 30.2%), and commercial revenue (482 million euros, accounting for 46.1%). (Data from Marca's 2024 Real Madrid financial report analysis) Compared to 2010, in 2024, commercial sponsorship revenue has surpassed sports broadcasting revenue, breaking the traditional dependence on revenue and exploring diversified profit models. During these 14 years, Real Madrid renovated the Bernabeu stadium, directly doubling their revenue on match days. The new stadium also utilized emerging technologies to reduce resource waste, allowing for multiple ways to utilize the stadium and further generate revenue through non match day activities such as concerts [8]. Real

Madrid is a membership-based club that sells individual seat permits to super VIP customers in order to generate more fans and increase the stickiness between the club and its fans, thereby increasing the club's revenue. Real Madrid's global brand strategy involves building a digital brand, enhancing commercial value through superstar effects, sponsorships, and product sales [9,10]. Real Madrid is also exploring new revenue channels such as NFTs, metaverse marketing, and overseas market expansion.

## 4 Analysis and Discussion

The commercialization path innovation of professional sports clubs can be analyzed from multiple theoretical perspectives. The traditional single income model is difficult to support the long-term development of clubs, so clubs need to reduce external debt and enhance profitability through diversified income sources. In the digital age, the enhancement of club brand value relies on interaction with consumers and brand stickiness [11]. The use of social media and digital tools has become the main way to increase club awareness and fan engagement today. Fans are the core asset of all sport's professional clubs. By building a super membership system and online fan community, clubs can deeply tap into the fan economy. Cross border cooperation extends from a single sponsor to sponsorship in different fields, enhancing the club's brand premium and market influence [6].

### 4.1 Analysis of Success Factors

Real Madrid has gradually transformed from a traditional revenue model in 2010, breaking through the barriers of traditional sports professional club revenue sources and transforming a professional sports club into a brand that combines cultural and historical heritage, national symbols, and business [12]. The success of Real Madrid lies in the organic combination of brand power, commercial acumen, and sustainable operation. (1) They have repeatedly created topics and popularity in global media through their star effect and high winning rate of the team, which has brought a certain amount of traffic to the club, formed a certain brand recognition, and contributed to the explosive sales of jerseys around the club, with an annual sales volume of over 3 million pieces [13]. (2) Optimization of income structure: Real Madrid has a world-class sponsor network, and long-term partnerships with globally renowned brands such as Adidas and HP have brought stable income. Cross border cooperation also brings more traffic and commercial value to the club. According to Spanish media RELEVO, LV will become a luxury travel clothing partner for Real Madrid next season. (3) The guarantee of competitive stability: the team's fighting power refers to the maintenance of a high winning rate. Real Madrid consistently ranks in the top three of La Liga and has won the Champions League multiple times. The split of La Liga broadcasting rights has placed Real Madrid in the top five in Europe, with a prize money of over 70 million euros for the Champions League champions. (4) Fan Economy and Derivatives: Thanks to the renovation of the Bernabeu Stadium, it can accommodate more spectators than before, with a capacity of 81000 people. Season ticket prices exceed 2000 euros, and

annual ticket revenue exceeds 150 million euros. In addition, VIP private rooms and catering services have further increased revenue. The construction of a smart stadium has made the Bernabeu a multi-purpose stadium. The stadium can host basketball games, rugby matches, as well as large-scale commercial performances such as concerts, which bring considerable income to Real Madrid. For example, by hosting Swift's concert, Real Madrid earned a total of 9.1 million euros in revenue, accounting for 70% of the total revenue [8]. (5) Digitization and Innovative Marketing: Exploring the Metaverse and NFTs, launching virtual fan memberships and NFT jerseys [14]. The production and content marketing of short videos involve creating documentaries about football stars, post-match interviews, behind the scenes footage, and expanding brand awareness and increasing fan stickiness through short videos such as YouTube and social media.

## 4.2 Application and Prospects of Emerging Technologies

The use of emerging technologies will determine whether the club can break down barriers and achieve sustainable operation in future market competition [4]. Real Madrid has made slow progress in the construction and promotion of NFT and metaverse fan communities and has not brought substantial income. Some emerging technologies can bring better value and experience to clubs and fans. For example, the use of holographic projection stands allows fans to wear lightweight glasses, providing a better viewing experience. Clubs can generate differentiated revenue through real-time advertising systems that automatically match ads based on the age, location, and consumption habits of each audience. Real Madrid also employs a dynamic pricing model to determine match ticket prices based on real-time market conditions [15]. The club has opened up NFT digital collections, which can release virtual products such as player training videos and digital jersey blind boxes to achieve diversified profits.

## 4.3 Challenges and Limitations Faced

The limitations of Real Madrid's current structure are: 1. Insufficient conversion efficiency in youth training, despite producing talents such as Benzema and Vinicius, most rising stars have not become top-level players. Mainly relying on purchasing superstars to maintain the team's strength, the transfer income fluctuates greatly. In recent years, the conversion efficiency of youth training has been much lower than other European powerhouses. (such as Barcelona, Manchester City, etc.) 2. Imbalance in regional markets: Real Madrid has a high dependence on the European market, with over 60% of its revenue coming from Europe [16]. Real Madrid lacks sufficient research strategies in developing emerging markets such as Africa and Southeast Asia, and deep cultivation still requires time.

Challenges faced: 1. The competition for sponsors is intensifying, with luxury and technology companies occupying top sponsorship positions. Real Madrid needs to continue to prove that its brand value is higher than other clubs. Faced with the underdeveloped emerging markets, the growth rate may be lower than expected. 2. The revenue from broadcasting rights has reached a bottleneck period: the overall growth rate of

broadcasting rights revenue for European football has slowed down (the 2023 UEFA Champions League broadcasting revenue will only increase by 1% year-on-year), and leagues such as the English Premier League and Bundesliga will distribute more traffic through localization strategies. 3. Financial risks of high paid players: after the epidemic, global inflation, players' salaries have a certain foam effect. If high-tech players fail to play their due level and cannot win more honors for the club, then the club's income will naturally decline, but players' salaries still need to be paid, which will become an uncertain factor affecting the club's profits. 4. Policy and regulatory uncertainty: Real Madrid has been fined over 200 million euros in the past for violating UEFA's FFP policy restrictions. This may affect Real Madrid's "Galacticos" style transfer strategy, weaken competitiveness, and indirectly affect commercial value [17].

## 5 Conclusion

The key element of innovation in the commercialization path of professional sports clubs is 1. Data assetization, utilizing high-tech to enhance technical integration capabilities, which facilitates the improvement of team competitiveness. 2. The transformation of the income side, the application of dynamic pricing engines, the development and sales of NFT digital products, and the monetization of the metaverse. 3. Cost optimization, construction of smart stadiums, and use of AI robots to save labor costs. 4. Explore the value of fans, enhance their viewing experience, and increase their sense of identification and belonging.

This study focuses on small and medium-sized professional sports clubs or emerging markets, with a focus on popular technologies such as NFT and metaverse. However, there has not been much research on AI driven fan behavior prediction and the application of blockchain in ticket anti-counterfeiting. Moreover, there has been excessive research and response strategies on the combination of commercial path innovation and optimization with sustainable development.

Future research can delve into how clubs can more efficiently utilize emerging technologies and combine digitalization with sustainable development goals to optimize their business paths, and study how to help clubs develop in emerging markets by integrating the club's global development concept with local policies, such as conducting friendly matches, star commercial activities, etc.

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