Dean&Francis
ISSN 2959-6130

The Comparative Study of Non-Olympic Events' Economic Value under the Integration Pathway of "Sports+Cultural Tourism +Technology"

Xuanyi Chen

School of Economics, Southwest Minzu University, Chengdu, Sichuan Province, 610225, China
202430203226@stu.swun.edu.cn

Abstract:

Against the backdrop of the "sports + cultural tourism + technology" paradigm, non-Olympic events are emerging as an important focus in sports economics research and practice. This study examines different types of non-Olympic events and compares their economic value under the integrated pathway of "sports + cultural tourism + technology," using the Chengdu World Games and the American Ultimate Disc League (AUDL) as case studies. It reveals the mechanisms and influencing factors behind the differences in value and proposes highly adaptable and replicable industrial pathways. By introducing the "Tri-dimensional Integrated Driving Model" and the "Divergent Industrial Pathway Framework," the study provides both theoretical support and practical guidance for local governments in event IP development, industrial resource allocation, and integrated policy design. The key findings are as follows: the integration pathway of "sports + cultural tourism + technology" significantly enhances the economic value of non-Olympic events and drives the development of related industries by leveraging regional resources. However, multi-sport and multi-integration events emphasize sustainability and heritage, thereby strengthening the long-term social value of events. In contrast, single-sport events prioritize specialization and the precise development of commercial value, particularly by harnessing technological innovation.

Keywords: Sport, Culture and Tourism, Technology, Non-Olympic, Economic Value.

1. Introduction

With the integration pathway of "sports + cultural tourism + technology" rising to the level of national strategic guidance and becoming a core trend in the upgrading of the sports industry, non-Olympic events are emerging as an important area of research and practice in sports economics. This is largely due to their flexible organizational models, high degree of marketization, and natural synergy with regional culture and tourism resources [1]. Compared with the global influence and standardized operational model of Olympic events, non-Olympic events—such as city marathons, extreme sports, and traditional sports—exhibit greater diversity in designing integration pathways. This is particularly evident in their use of technology (e.g., smart spectating, virtual sports, and digital sports marketing) and in cultural tourism integration (e.g., sports + scenic tourism, or combining sports events with intangible cultural heritage), which demonstrates their high adaptability and compatibility [2].

However, existing research largely focuses on assessing the economic impact of single-sport events, with limited attention to systematic comparisons across different types of non-Olympic sports events. Under the context of deep integration across the three dimensions of sports, cultural tourism, and technology, different event types vary in the composition of their economic value (e.g., direct consumption, industrial spillover effects, and brand value growth), as well as in their value realization pathways and the length of their industrial chain extensions. Current studies also lack robust quantitative analyses and comparative frameworks. Moreover, there is no unified evaluation system to measure the correlation between the depth of integration and economic value, nor are there targeted optimization models for different types of events.

To address these gaps, this study focuses on diverse non-Olympic sporting events, comparing their economic performance under the integration pathway of "sports + cultural tourism + technology." It reveals the mechanisms and influencing factors underlying value differences and proposes industry pathway recommendations that are both adaptable and scalable. Specifically, this study introduces the "Tri-Dimensional Integration Model" and the "Differentiated Industrial Pathway Model," offering theoretical and practical foundations for local governments in event IP development, resource allocation, and integrated policy formulation.

2. Case Reconstruction

2.1 Taking the 2025 Chengdu World Games as an Example

This event represents a comprehensive and diversely integrated competition among non-Olympic events. The 12th World Games, hosted for the first time in a mainland Chinese city, is expected to significantly stimulate the development of industries such as hospitality, catering, culture, and tourism. Drawing on the precedent of the World University Games held two years earlier, the World Games are projected to generate a sustained consumption scale valued in the tens of billions of RMB [3].

Chinese intelligent manufacturing played an active role in the event. For instance, in the Athletes' Village, F2 outdoor security patrol robots patrolled the streets, detecting potential risks and ensuring event safety. In recent years, Chengdu's technology industry has experienced unprecedented growth, with local enterprises successfully developing a wide range of technological products, many of which have already been commercialized. The World Games provided a prominent platform to showcase these products. Technology not only supported event operations but also facilitated cultural exchange. For example, Chengdu-made simultaneous translation glasses, capable of real-time translation in 40 languages and equipped with an AI assistant, enabled smoother communication among international athletes [3].

The Games also stimulated the regional tourism economy in Chengdu and neighboring cities, while advancing the so-called "ticket economy." Event tickets and show stubs could be used to obtain exclusive discounts at over 140 restaurants, 11 museums and scenic spots, and 25 hotels in Chengdu. As Cai Shangwei, a Director at Sichuan University, noted, the "ticket economy" represents a form of joint economy, whereby a single element connects diverse consumption scenarios and participants. For consumers, it enhances cost-effectiveness, reduces both monetary and time costs, and enriches the overall consumption experience. For the city, it expands both the volume and scope of consumption, thereby playing a positive role in promoting economic growth [3].

The event economy is now one of the most important drivers of urban economic growth. The Chengdu World Games brought in a lot of athletes and fans, and it also helped related businesses grow. The Chengdu World Games were a success for the city because they made it more well-known and powerful, and they also brought long-term economic benefits to the city [3].

As the city's international influence grows, Chengdu's appeal keeps getting stronger. Big sporting events also help businesses find new employees and grow [4]. This type of international exchange, facilitated by events, cultivates friendship, thereby advancing the growth of cultural and tourism-related industries. It has made it easier to come up with new ways to use sports tourism resources and made sports tourism have a bigger impact on other industries [5]. The Chengdu World Games greatly improved the city's economy and made it more visible to the world. They did

ISSN 2959-6130

this through the „World Games Caravan," the „Ticket Economy," and the participatory „World Games Spaces" [3].

2.2 Taking the American Ultimate Disc League (AUDL) as a Case Study

The professional ultimate frisbee league in the United States was established on the foundation of more than five decades of collegiate tournaments and extensive grassroots participation, which fostered both talent development and market demand. Key resources include a large and loyal fan base, a well-developed collegiate competition system, access to university and community venues, and strong support from developed urban clusters. The league's developmental trajectory advanced through its startup phase and the Major League Ultimate (MLU) era, ultimately shaping the current structure in which the AUDL dominates, complemented by women's leagues such as the Premier Ultimate League (PUL) and the Western Ultimate League (WUL) [6].

The league's integrated "sports + cultural tourism + technology" model drives economic growth through multiple channels. Home games stimulate consumption in accommodation, dining, and transportation, while strategically selected venues (e.g., beachfronts and parks) enhance the spectator experience. Future development could include "game-watching + city experience" tourism packages. In terms of brand building, the AUDL leverages digital platforms such as social media (700K+ followers), its official website (2.5 million annual visits), and video platforms (100 million annual views). Partnerships with broadcasters including ESPN and Fox Sports attracted over 20,000 viewers for its debut coverage. Moreover, the league established a technology subsidiary to develop data-processing systems and frisbee video games, while capitalizing on legalized sports betting through the Play10 platform [6]. Technological innovations have significantly contributed to the league's growth, including multi-angle instant replays, data visualization to improve broadcast quality, and the application of artificial intelligence and big data analytics [7,8]. These technology-driven measures have played a pivotal role in advancing league operations and fan engagement.

The economic structure encompasses both direct spending—such as tickets, accommodation, dining, transportation, and licensed merchandise—and indirect effects including tourism-related consumption, equipment sales (e.g., VC Ultimate products), and cultural creative goods. Media exposure also boosts city recognition, with clubs themselves emerging as new urban landmarks [6].

The company makes money from a variety of sources, including franchise fees, sponsorships, media rights (including FS2 contracts), and ticket and merchandise sales. New areas like sports betting and digital gaming are also becoming more important [6]. The industrial chain includes activities that happen upstream, like making equipment and training new players through schools and clubs; activities that happen in the middle, like managing events, making media, and providing data services; and activities that happen downstream, like tourism consumption, IP licensing, and community engagement. All of these things make the league more competitive.

The AUDL experience offers significant insights for the advancement of analogous non-Olympic sporting events. To make single-discipline competitions work, you need to have a good understanding of public fitness programs and school sports, and you should learn from the AUDL's integrated development model. This includes looking into the „sports + cultural tourism + technology" path, expanding global views, building complete industrial chains, and improving media partnerships through new ideas like live broadcasting and virtual experiences. Additionally, it is important to focus on developing the market, improving infrastructure, and making strategic capital investments to raise the quality of events and benefit everyone involved.

3. Case Analysis

The Chengdu World Games and the American Ultimate Disc League (AUDL) case studies teach us a lot about how non-Olympic sports events work and how they affect the economy. Both events show how bringing together „sports, cultural tourism, and technology" can help the economy. Through cultural tourism-driven programs, they were able to get people to spend more money in host cities in the short term. This helped the hospitality, dining, and transportation industries, and it also made their sports more well-known in the culture. By using AI, big data, and digital platforms, technology made their business even more profitable by making it easier to run. Because of this, sponsorships, media rights, and merchandise brought in more money. This method not only made better use of sports tourism resources, but it also made connections between different industries stronger. This led to more equipment manufacturing, IP licensing, and community engagement.

One big difference between Olympic and non-Olympic events is how well their markets and support systems work together. The World Games and AUDL aren't Olympic events, but they rely heavily on cultural and infrastructure resources in their areas. Because of this, they are more affordable and connected to the area. On the other hand, Olympic events benefit from centralized resources that the government often supports. This makes things more stable, but less adaptable. They also make money in very different ways. There are many ways to make money from non-Olympic events. For example, merchandise,

niche media deals, and interactive platforms like sports betting, which are more popular with younger audiences even though they can be risky. On the other hand, Olympic events depend on big, predictable sponsorships and broadcasting contracts. They attract a larger but more traditional group of people.

Despite these differences, both case studies demonstrate that there are universal strategies to enhance non-Olympic events. They use local resources well to offer high-value, low-cost experiences that are great for small and medium-sized cities. Sports, cultural tourism, and technology are all things that can work together across sectors. For example, they can work together to make equipment and train people, and then they can work together to bring in tourists and get people involved online.

But their strategic focuses are different depending on the size and goals of the event. The Chengdu World Games, which featured many sports, put a lot of thought into how to create a lasting social impact through planning for the future, branding the city, and preserving its culture. This approach is shown by things like turning venues into community hubs and putting all of the event's IP into one big marketing campaign [9]. On the other hand, the AUDL was a single-sport league that focused on making the most money possible by specializing in one sport and using technology to make money, like digital fan engagement platforms and sports betting integrations.

In the end, these cases show how non-Olympic events can do well by finding a balance between regional identity, new technology, and strategies that put the audience first. Their successes provide a replicable model for nascent sports entities aiming to establish enduring niches within a competitive global marketplace.

4. Theoretical Framework for Economic Value of Non-Olympic Sporting Events

First, it is split into a model based on three-dimensional integration and a model based on a different industrial pathway.

From the point of view of the three-dimensional integration-driven model, the economic value of non-Olympic events comes from the deep integration of sports as the core, cultural tourism as the carrier, and technology as the engine. Sporting events are ways to get important audiences to come, and cultural tourism resources offer ways for people to spend money in their own areas. Technological innovation improves the efficiency of value conversion by using immersive experiences (AR/VR), digital marketing, and smart services. The level of three-dimensional integration affects economic value in three ways: the foundational layer (shared facilities that lower costs), the experiential layer (cross-sector collaboration that makes people more likely to buy), and the innovation layer (technology that makes it possible to create new value). Short-term benefits are based on short-term increases in consumption in areas like retail and hospitality. Long-term benefits are based on things like improving infrastructure, branding cities, and building industrial ecosystems. Dynamic investment mechanisms, like putting short-term profits back into technology infrastructure, keep these in balance.

From the perspective of the differentiated industrial pathway model, three types can be identified: cultural tourism-reliant, technology-driven, and comprehensive fusion. The cultural tourism-reliant pathway is built around natural or cultural heritage as the core attraction. Event designs highlight regional cultural symbols (e.g., Qinghai Lake cycling races, dragon boat festivals) and extend consumption chains through customized tourism products such as track-side sightseeing or culturally themed camps. The technology-driven pathway emphasizes smart venues, virtual events, and digital derivative development (e.g., NFT-based esports), reshaping profit models through real-time data services and immersive content distribution. The comprehensive fusion pathway constructs a trinity ecosystem of "event IP + scenario technology + cultural tourism services" (e.g., Chengdu World Games), achieving multiplier effects through policy coordination, such as land-use support and data sharing.

From the perspective of the integrated value assessment system, core fusion indicators include industrial coupling coefficients (e.g., cultural tourism resource utilization), technology penetration rates (e.g., smart device coverage), and business diversity indices.

Finally, in terms of economic value measurement methods, certain intangible assets remain difficult to evaluate using standardized approaches [10]. For tangible assets, direct benefits include GDP contribution and consumption multipliers (income-to-investment ratios), measured through GDP growth and multiplier effects [11]. Indirect benefits involve related industry stimulation rates (e.g., food and beverage, manufacturing) and employment elasticity coefficients. Soft benefits cover brand value enhancement (media influence indices), resident approval levels (social surveys), and innovation diffusion effects (e.g., technology patent derivatives).

5. Conclusion

The findings of this study demonstrate that the integration of sports, cultural tourism, and technology significantly enhances the economic value of non-Olympic sporting events. By leveraging regional resources and adapting to the contexts of small and medium-sized cities, this integrated model delivers cost-effective benefits while stimulating the growth of related industries. Nonetheless,

ISSN 2959-6130

different event types exhibit distinct strategic orientations. Comprehensive, multi-integrated events such as the Chengdu World Games emphasize sustainability and legacy development, aiming to maximize long-term social value while reinforcing unified branding campaigns around event IP to amplify promotional impact. In contrast, single-discipline events such as the American Ultimate Disc League focus on sport-specific specialization and the meticulous development of commercial value through technological empowerment.

From a theoretical perspective, this study makes several important contributions. First, it establishes a differentiated industrial pathway model, analyzing non-Olympic events through two complementary frameworks—the three-dimensional integration-driven model and the differentiated industrial pathway model—thereby broadening the analytical scope of economic research on non-Olympic sports. Second, by introducing a framework that links integration depth with economic value, the study provides improved tools for identifying new growth opportunities and potential risks in the sector.

Practically, the study yields valuable insights for stakeholders. Governments should formulate tailored support policies that reflect the characteristics of different event types, rather than adopting uniform approaches. Event organizers need to carefully align integration strategies with regional resources and audience characteristics. Across the industry chain, stronger emphasis should be placed on collaborative innovation to fully unlock the long-term operational potential of event IP.

Several limitations should be acknowledged. The research primarily focused on large-scale events, with relatively limited coverage of smaller non-Olympic competitions due to their niche positioning and lower visibility. In addition, the economic valuation of intangible assets inherent in sports events remains methodologically challenging, making standardized assessment difficult.

Future research could explore several promising directions. The application of big data analytics and artificial intelligence may significantly improve the precision of measuring integration depth and its economic impacts. As public interest in non-Olympic sports grows, expanding the sample to include more small- and medium-sized events would provide valuable comparative insights. Overall, this study lays an important foundation for further exploration of how non-Olympic sporting events can achieve sustainable development through strategic resource integration and technological innovation.

References

[1] Dolbysheva N G. Sportization of non-Olympic sport as a social and cultural phenomenon. Slobozhanskyi Herald of Science and Sport, 2014, 1(39): 33-36.

[2] Dai D. Study on the innovative development path of rural characteristic sports events in Ganzi Prefecture under the background of culture and tourism integration. Advances in Social Science and Culture, 2024, 6(6).

[3] Chen X B, Lu Z K. Chengdu World Games ignite new economic engine. China Business Journal, 2025-08-11(B09).

[4] Rossini L, Falese L, Andrade A, Federici D. Exploring the socio-economic impact of small and medium-sized sports events on participants, tourism and local communities: A systematic review of the literature. Journal of Sport & Tourism, 2024, 28(4): 197-220.

[5] Yang Q. Research on the development of sports tourism in Chengdu under the background of a city of events. Chengdu Sport University, 2024.

[6] Wu Y, Jiang T Y, Ouyang L. Development experience and enlightenment of American team flying disc sports. Journal of Guangzhou Sport University, 2024, 44(4): 87-99.

[7] Gao Z. Artificial intelligence techniques for complex big data environments: Methods and perspectives. Advances in Engineering Innovation, 2025, 16(7): 173-176.

[8] Dong D, He B, Dong C. Advances, trends, and hotspots in sport for sustainable development: A bibliometric analysis using CiteSpace and VOSviewer. Innovation and Emerging Technologies, 2025, 12.

[9] Bodet G, Lacassagne M F. International place branding through sporting events: A British perspective of the 2008 Beijing Olympics. European Sport Management Quarterly, 2012, 12(4): 357-374.

[10] Ren L L, Zhang M, Zhang L N. Research on the transaction model of intangible assets in sports events based on blockchain technology. In: China Sport Science Society. Abstracts of the 12th National Sports Science Conference – Thematic Report (Sports Information Branch). Xi'an Physical Education University, 2022: 72-73.

[11] Ciaffi G, Deleidi M, Di Domenico L. Fiscal policy and public debt: Government investment is most effective to promote sustainability. Journal of Policy Modeling, 2024, 46(6): 1186-1209.