

Research on the Multi-Stakeholder Collaborative Governance of the Sustainable Utilization of Large-Scale Basketball Venues After Competitions

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Abstract: *The large-scale basketball venues have some kind of physical assets but are underused in the off-season; therefore, there are problems of a lack of functional conversion, high operating costs and low market demand. The problems above are due to the special attributes of the assets and the different valuations offered by all parties. The old way of single-dominant management cannot solve this problem. The foundation and implementation path of multi-stakeholder collaborative governance to solve the problems mentioned above will be introduced in this paper. First, there is the construction of a governance theory for this situation, an analysis of the specific characteristics and difficulties of post-competition venue utilisation, the roles and functions of many parties involved, and the extension of the theory of collaborative governance to this particular environment. According to the idea of resource dependence, this paper studies the interaction structure of all parties, reveals the structural features and basic operating mode of a polycentric collaborative governance network, and shows how formal and informal institutions affect collaborative behaviour. Finally, this paper offers a full set of effectiveness indicators for both the process and the results, points out the main causes of problems in collaboration, and provides some ways to strengthen the governance system through the development of dynamic capabilities. The following are organized systems of theories that can help us understand and improve the post-competition governance of large-scale sports venues.*

Keywords: *Large-scale basketball venues, post-competition use, sustainability, multiple stakeholders, collaborative governance, governance effectiveness*

Introduction

As the usual buildings for the top-level sports competition and public cultural activities, large-scale basketball venues are often used after such events, and now this has become a problem around the world with considerable economic and social benefits. Since these places are for special occasions and have been built for that purpose, it is likely that they will not be used often after the event and will thus incur financial losses. The reason for this problem is that the high concentration of specialised assets does not meet the dispersed and diverse needs of society. Most of the above studies have focused on the technical problems of operation and space utilisation. However, the continuous use of venues is not only a problem of engineering and business; it is also a governance issue involving many parties with different interests and changing environmental conditions. Therefore, organised research on the problem from the perspective of multi-stakeholder collaborative governance should be carried out in theory and in practice. It does not have to be the old idea of management. Based on the reasons for stakeholder interaction at home, and drawing on the theory of network construction and institutional formation, this paper aims to provide a new way to study and deal with the collective action problem in post-competition venue use, and also explores governance models that can achieve economic sustainability, functional diversification and integration of social values.

1. Theoretical Construction of Governance for the Post-Competition Utilization of Large-Scale Basketball Venues

1.1 Analysis of Specific Features and Problems in the Utilization of Post-Competition Venues

There are some attributes of this type of large-scale basketball arena after the competition, and it is still in line with the original design goals for the construction of the arena. Given that these places have

different physical characteristics and are generally very large spectator stands with high-standard lighting and equipment systems for broadcasting, and exclusive functional areas in line with competition requirements, the problems they will face in functional conversion after the competition will not be the same as those of traditional sports facilities. These places have certain resources and are thus given specific shapes and functions. Due to this particularity, the structure has high operating and maintenance costs but low market demand after the venues are taken out of the event cycle; thus, there is a risk of sunk assets and value lock-in^[1].

Therefore, there is a kind of system disorder. Post-competition use refers to changes in the functions and technologies of the physical space after the competition, and it is also subject to fluctuation due to all sorts of reasons in a dynamic environment. Changes in market demand, alterations in people's expectations for social and cultural activities, and all sorts of valuations of venues by different people have led to unstable decisions. Therefore, the places will no longer be used in the same way. It is difficult to meet the demand for short-term operational pressure and, at the same time, achieve long-term value creation; thus, one must balance the needs of professional sports competitions with public service functions and find a way out under many constraints.

1.2 Definition of the Roles and Functions of Multiple Stakeholders in the Sustainable Use of Venues

There are many kinds of entities in the area of post-competition sustainable use of venues. According to the property-right relationship of the assets in the venue, the amount of resource investment and the main interests of the parties, they can be divided into two types: direct-acting subjects and derivative-interest subjects. The direct parties are generally the owners of the assets, the main operating institutions and the long-term anchor users. They are directly responsible for the financial situation, physical maintenance and general operation of the venue, and their decisions and actions will directly affect whether the venue can operate normally. The aim of the above subjects is to achieve the goal of organising the preservation and enhancement of the value of the venue's assets.

Derivative interest subjects refer to the surrounding commercial entities, community organisations, professional service institutions and the general public. Although they do not directly manage the assets of the venue, their activities are closely related to the operating efficiency and function of the venue, and they also enjoy the socio-economic spillover effects of the venue. The first two are to offer demand information and other services, to support the social network, and to participate in value co-creation. The relationship among the many parties is not one of simple parallelism; rather, due to resource dependence, value exchange and risk sharing, they are closely linked in an intricate manner. At different times, all these parties have been adding or removing roles and functions to build the basic framework of governance for venue use together^[2].

1.3 Application Extension of Collaborative Governance Theory in the Era of Post-Competition Venue Utilization

The theory of collaborative governance can help us consider all the links in dealing with the problem of after-competition venue utilisation. The old linear management model is too centralised and can no longer solve the problems of high asset specificity and many parties in the use of venues; thus, there are decision-making bottlenecks and resource waste. Collaborative governance refers to the long-term cooperation and collaboration among all parties with different resources, interests, knowledge systems, etc., in the form of formal or informal institutions. The goal is to cultivate a sense of social responsibility in all sectors of society so that we can cooperate to address the serious problems facing our country.

Based on the above reasons, the basic ideas of the theory of collaborative governance need to be expanded. The Goal of organising the use of the post-competition venue is to build a very adaptable system that can respond quickly to all kinds of unexpected events, gather all sorts of scattered resources, and add value through synergy. Therefore, the focus of collaborative governance should shift from the division of powers at different times to the creation of interaction, learning and adaptation, etc., and other mutual benefits. The first aim of the expansion of theory is to investigate how, in the absence of an almighty supreme leader, the design of rules, the construction of information-sharing platforms and the development of trust mechanisms can be integrated to guide all parties with different interests to achieve strategic coordination and mutual benefit in the management of venues, thus revealing feasible governance paths for the long-term use of venues.

2. Mechanism Design for Multi-stakeholder Collaborative Governance

2.1 Analysis of Resource Dependence and Interaction Patterns Among Multiple Stakeholders

In fact, the process of using the large-scale basketball venues after the competition is an extension of cooperation among many different parties and is based on the interdependence of essential resources. The listed resources are quite specific and scattered, such as ownership of physical assets, financial capital, special operating knowledge, market channels, brand influence and social legitimacy. No single party can raise all the funds for the long-term operation of the venue independently, so some cooperation among the parties will be necessary. The kind of dependence is different, and it is not reciprocal. That is to say, the stakeholders are not all the same in terms of the scarcity, non-substitutability and potential for power derivation of the resources they control, and thus various basic dynamics and possible conflicts will occur in their interaction.

Due to the structure of resource interdependence, many kinds of interaction will occur among the parties. Generally speaking, there are three kinds of patterns: resource-exchange interaction, information-sharing interaction and joint-decision-making interaction. A kind of resource-sharing interaction is an immediate exchange of interests and cooperation, such as joint operation and sharing of professional skills. The basis of cooperation is the sharing of information, and thus the uncertainty of the environment will be reduced. Joint decision-making interaction is the group's talk about the general direction or specific problems in the development of the venue, and it shows more cooperative governance. The Pattern of Interaction is not fixed; rather, it will change among states of competition, negotiation and cooperation according to changes in the degree of resource dependence, level of trust and external environment. They will affect the carrying out and stability of joint governance.

2.2 The Network Structure of Collaborative Governance and Its Operating Mechanism

In brief, the cooperative governance relationship of all parties responsible for the post-competition use of venues is a polycentric and composite network structure. The Network Structure is not a typical form of hierarchy or market. All the nodes are independent units, and the links among them are of different types and based on resource dependence, contracts, shared norms, and so on. The characteristics of the network structure are that the nodes are heterogeneous, the connections are irregular, and the power distribution is dispersed. There are many active centres for action in the network, and there is no single ultimate authority; centrality can change according to the problem area and resource conditions, so the network can deal with serious problems flexibly and resiliently^[3].

There are many reasons for the above situation in the collaborative governance network. The two main ways are the spread of information and the accumulation of knowledge; organisation of interest and risk sharing; adaptive learning and feedback. The spread of information and the integration of knowledge can spread and organise dispersed information and tacit knowledge in a network to provide a cognitive foundation for joint decision-making. Coordination of interests and risk-sharing mechanisms can be employed to deal with conflicts of interest and potential losses in cooperative activities through negotiation, compensation, joint funds, etc., to ensure the stability of network cooperation. Adaptation and feedback mechanisms will help the network learn from the results of operation among its components and changes in the external environment, so it can adjust its plan of action and interaction rules dynamically to improve the overall stability of the governance system in the face of uncertainty. For the reasons mentioned above, all the different and loosely connected parties will be organised together to achieve better results through cooperation.

2.3 Shaping the Effect of Institutional Construction and Rules on Cooperative Behavior

The good effects of joint governance can be achieved by building a system of institutions and rules that are widely accepted and respected. Institutions are relatively stable organisations or rules that organise the relationship among all parties involved and determine the rights and obligations of various acts. With the construction of the new post-competition collaborative venues, the institution has been organised in two ways: first, there are formal written rules, such as cooperation charters, operation agreements and performance evaluation standards; secondly, there are informal norms, practices and shared expectations, such as a culture of trust, professional ethics and reputational mechanisms for cooperation. A rule-based system is open-structured, so there will be no problem of opportunism or the need for cooperation. Informal norms are deficiencies in formal rules, and people cooperate voluntarily according to social norms and other reasons.

The three ways to promote cooperation in the rule system are the creation of expectations, incentives and constraints. Clear rules offer a stable reference point for behaviour, and all parties know what is expected of them, so they can cooperate well for a long time. Rules of rewards and punishments will be set to motivate employees to work harder and help the company achieve its goals. It should not be that people harm the public interest through their behaviour. A good set of rules can provide some uniformity and stability to the collaboration network, but it should not be too rigid, and new ideas and changes should also be allowed. Therefore, rules and institutions for the game need to be established to make collaborative governance an organised and stable system of governance.

3. Assessment of the Effectiveness and Path for Improvement in Collaborative Governance of Sustainable Use of Venues

3.1 Evaluation Dimensions and Indicator Systems for Collaborative Governance Effectiveness

To know how well the joint governance is working, we should also be aware of changes in institutional processes and social equality, not just economic performance. The dimension of process refers to the quality and health of the collaboration act itself, and the main assessment indicators are the extent and level of participation by all parties, whether there is adequate information sharing and communication, whether decisions are inclusive and open, and how well conflicts are mediated. The output dimension refers to the actual results of the cooperative's activities, so when evaluating this dimension, one should consider the financial conditions of the venue's asset base, the degree of optimisation in the use of facilities, the diversity and social acceptance of services provided, regional vitality, and the construction of innovation networks under the leadership of the venue as a socio-cultural hub. The two dimensions are related; a good cooperative process will lead to good and lasting results, and the results can also be used as feedback to improve the cooperative process in the future^[4].

According to the above dimensions, a multi-level index system will be constructed. The three parts of the system should be the main goal, the desired state and the corresponding index. First, we need to do our best to achieve the highest level in the goal of continuous use of the venue, maintain the value of the asset, and improve the social and environmental conditions. First of all, we will set some specific goals to improve the quality of governance in the previous areas, such as the stability of the cooperation network, the level of resource integration and adaptability to changes in the market. The above are the indices for observation, and the particular indicators of observation are: the frequency and quality of contributions from stakeholders to the meeting, the number of cross-organizational projects, the coverage rate of resource-sharing agreements, the user satisfaction index, and the proportion of revenue generated from non-competition events at the venue. Build an index system to give us a general overview of the results of joint governance in an organised way.

3.2 Identification of the Main Obstacles to the Effectiveness of Collaborative Governance

There are many problems with the institutions in charge of joint governance. Cognitive and Informational Asymmetries are the Root Causes. As all the parties concerned have different professional backgrounds, organisational goals and interests, they will have different views on the problems, prospects and priorities of sustainable use of venues. At the same time, the corresponding data on costs, market demand and operation cannot be obtained. An information barrier will prevent the construction of a common knowledge base and a shared mental model; thus, problems will arise in the process of collective decision-making or the optimal path will not be realised.

The problem is that there is a shortage of the system of government and institutions. There is a will to cooperate, but without strong coordination centres and decision-implementation mechanisms in the network, it may be in a state of "talking without deciding" or "deciding without doing". Conflicts of goals and problems in the division of interests often occur; for example, the demand for short-term operation may conflict with the goal of long-term brand building, or commercial profits may not be in line with the concept of public service. If there are no fair arbitration and mediation institutions, then cooperation will collapse. In addition, there is path dependence and organisational inertia. The current operating mode and mentality of the departments will not promote the generation and implementation of new ideas; moreover, collaborative governance will be reduced to a formality and fail to achieve substantial resource reallocation or model innovation.

3.3 Optimisation Paths for the Collaborative Governance System Based on Dynamic Capabilities

First, to improve the efficiency of collaborative governance, we need to build a system of dynamic capabilities, and at the foundation of this system is the ability of the governance network to change continuously in light of changes in its environment, seize opportunities, and rearrange resources and processes. The first way to improve is to strengthen and expand the system of learning. Periodically, there will be cross-departmental meetings to discuss and analyse problems; at the same time, the reasons for failure will be identified, a knowledge base will be built, successful cases will be spread widely, and many small-scale pilot projects will be conducted to test new ideas at a lower risk. Organised learning can regularly change the cognitive system and behaviour of the network^[5].

Second, an addition will be made to introduce some flexibility in the system of government. Therefore, the network should be relatively open, and at the same time, organised additions of new relevant parties can be made from time to time to introduce new resources and ideas. At the same time, module task forces or project-based teams should also be formed in the network to deal with problems flexibly and specifically. It will help us solve the problems in time and keep the whole network running normally. Optimisation will be used to close the loop for feedback finally. According to the results of continuous monitoring and evaluation of the effectiveness indicators, the performance report will be updated, and revisions will be made to the rules, allocation of resources and interaction process accordingly. Therefore, there will be an endless cycle of "evaluation-learning-adjustment", and the collaborative governance system will be able to be modified and improved at a higher level^[6].

Conclusion

Based on the above analysis, this paper will study the theoretical basis and practical conditions of the collaborative governance model for the sustainable use of large-scale basketball venues after the competition in terms of venue asset specificity, multiple stakeholders and environmental complexity. Based on the above research, good collaborative governance should know where the resources of all parties in the network are located, design a good polycentric network operation mechanism, and continuously build both formal and informal rule systems. Based on the results of the economy and society under joint governance, joint governance has shown good results, and the process of joint governance should also be inclusive, open and adaptive. The three directions for future research are as follows: First, how to improve the dynamic capabilities of governance networks in the digital era through the construction of information-sharing platforms and data-coordination mechanisms will be studied. Second, there will be many informal norms and various ways of building trust in different cultures and social groups, as well as their corresponding effects on the performance of governance; this will also be dealt with. Third, over a long period of time, continuous observation and verification will be made on the actual results of Optimising Pathways According to Dynamic Capabilities to strengthen the theoretical system and practical tools for achieving sustainable governance of sports venues in the post-competition era.

References

- [1] Lin Xianpeng, et al. "Sustainable Development of Winter Olympic Legacy during the 15th Five-Year Plan Period: Research Based on the Post-Competition Development and Utilization of Beijing Winter Olympic Venues." *Journal of Tianjin University of Sport*, vol. 40, no. 06, 2025, pp. 631-638.
- [2] Chen Xiaopei and Cao Qinghua. "Research on the Post-Competition Utilization Model of Large-Scale Sports Venues: From the Perspective of Urban Sustainable Development." *Leisure Products and Technology*, no. 23, 2025, pp. 41-43.
- [3] Qiao Zichen. "Analysis of Public Management Strategies for the Post-Competition Sustainable Utilization of Large-Scale Sports Venues." *Society and Public Welfare*, no. 20, 2025, pp. 109-111.
- [4] Zhang Qiang and Meng Xiangyang. "Difficulties and Pathways for the Post-Competition Sustainable Utilization of Large-Scale Sports Venues in China." *Liaoning Sport Science and Technology*, vol. 47, no. 04, 2025, pp. 36-41.
- [5] Zeng Bosi and Zhang Yao. "Business Model Identification and Cultivation: An Analysis of Pathways for the Post-Competition Sustainable Utilization of Large-Scale Sports Venues." *Journal of Physical Education*, vol. 31, no. 05, 2024, pp. 37-43.
- [6] Zhang Qiaolong. *Research on the Post-Competition Utilization of Ice and Snow Venues of the 2022*

Beijing Winter Olympics. 2023. Tianjin University of Sport, MA thesis.