

Original Research Article

Research on risk management of sports event operations in SMEs*Bailing Sun¹, Nian Liu²**1 Wenzhou Business College, Wenzhou City, Zhejiang Province, 325000, China**2 Zhujiang College of South China Agricultural University, Guangdong City, Guangdong Province, 510900, China*

Abstract: With the vigorous development of the sports industry, SMEs are playing an increasingly important role in sports event operations. However, they face complex and diverse risks, which seriously affect the smooth progress of the events and the sustainable development of the enterprises. This paper, through methods such as literature review, Delphi method, and Analytic Hierarchy Process (AHP), conducts an in-depth analysis of the operational risks of SMEs in sports event operations, constructs a risk assessment index system with 2 first-level indicators, 6 second-level indicators, and 21 third-level indicators, and verifies the rationality and practicality of the system through case analysis. The research results show that SMEs should focus on internal risks and force majeure risks in external risks during sports event operations, while not ignoring the impact of other external risks. Through scientific risk assessment and management, SMEs can effectively enhance their sports event operation capabilities and market competitiveness.

Keywords: SMEs; Sports event operations; Risk management; Index system

With the continuous increase in the number and scale of sports events, SMEs, as important organizers of sports events, are facing increasingly prominent operational risk issues. The commercialization and marketization of sports events are constantly improving, exposing SMEs to complex internal and external environments and various potential risks during event operations. These risks originate not only from the enterprise's own management, funds, and talent but are also influenced by external factors such as event characteristics, market competition, and policies. However, current research on the operational risks of SMEs in sports events is relatively scarce, lacking a systematic risk assessment index system and effective risk prevention measures. This paper aims to construct a set of operational risk assessment index systems applicable to SMEs in sports events, analyze the risks they face during event operations in depth, and propose corresponding risk prevention measures to provide theoretical basis and practical guidance for their risk management, helping SMEs enhance their event operation capabilities and market competitiveness.

1. Relevant theories and foundations

The sports event industry, a crucial part of the sports sector, has seen rapid growth. Scholars like Xue Feng (2015) highlight its role in boosting urban competitiveness and driving economic development. The 2008 Beijing Olympics marked a turning point, leading to more frequent and high - level events in major cities. Developed countries' shift from quantity - to quality - focused sports industries offers valuable lessons for China.

Research on the operational risks of sports companies reveals issues such as insufficient professional staff, funding shortages, and poor marketing in sports event firms, impeding their healthy development. Ni Dongmei notes chaotic internal management in Chinese sports companies, while Zhang Xinying highlights problems like concentrated equity and flawed governance. However, most research focuses on large companies or specific areas, neglecting the operational risks of SMEs in sports events.

In risk assessment, scholars like Zhang Chaohui and Xu Chengli have explored sports event risks, with Chen Qin and Wen Yang developing evaluation systems for amateur clubs and large - scale venues. Sun Bailin and Xu Haihuan have also contributed to risk evaluation in sports event operations. Despite these efforts, targeted index systems and empirical studies on SMEs in sports events are still lacking.

2. Theoretical and conceptual definitions

SMEs play a unique role in sports event operations. Their scale and resource characteristics determine that their operational models differ from those of large enterprises. SMEs usually have the advantages of high flexibility and fast decision-making, but also face bottlenecks in funds, technology, and talent. In sports event operations, they may focus more on creating localized and characteristic events to meet specific market demands. Their operational risks are not only affected by internal management factors but are also closely related to external market environments and policies.

Risk management is a systematic process that includes risk identification, assessment, response, and control. In sports event operations, accurately identifying potential risks is the foundation of management. By using scientific methods to assess the likelihood and impact of risks, targeted response strategies can be formulated to reduce risk losses and achieve the goals of sports event operations. Risk identification requires a comprehensive consideration of all aspects and related factors of the event. Assessment uses qualitative and quantitative methods to determine the priority of risks. Response strategies include risk avoidance, transfer, control, and retention, and enterprises need to choose appropriate strategies based on their own situation and risk characteristics.

3. Construction of the risk assessment index system for smes in sports event operations

3.1. Indicator screening and determination

In the research on risk management of SMEs in sports event operations, two first-level indicators were initially determined through methods such as literature review, expert interviews, and the Delphi method: internal risks and external risks. These two indicators cover various risk factors that SMEs may face during sports event operations, providing a basis for the screening of second-level and third-level indicators.

After determining the first-level indicators, through further literature research and expert consultation, the indicators with a coefficient of variation less than the threshold were considered to be indicators with relatively consistent expert opinions and were retained; those with a coefficient of variation greater than the threshold were deleted or further modified. Six second-level indicators were ultimately screened out, namely personnel risks, financial risks, operational management risks, market risks, policy risks, and natural and force majeure risks. These second-level indicators concretize the connotations of internal and external risks, making them more targeted and operable.

Based on the second-level indicators, the Delphi method and AHP were further used to refine and determine the third-level indicators under each second-level indicator. For example, under personnel risks, four third-level indicators were determined: employee professional quality risk, event planning risk, emergency handling capability risk, and talent turnover risk. Under financial risks, four third-level indicators were determined: fund shortage risk, financial budget risk, cost control risk, and event revenue risk. These third-level indicators further refine the specific manifestations of risks, providing a more detailed basis for risk assessment.

3.2. Weight determination

Through the AHP, the weights of internal risks and external risks were calculated to be 0.45 and 0.55, respectively. This indicates that in the risk of SMEs in sports event operations, the weight of external risks is slightly higher than that of internal risks, suggesting that the external environment has a more significant impact on event operations.

Under internal risks, the weights of personnel risks, financial risks, and operational management risks were 0.35, 0.30, and 0.35, respectively. Under external risks, the weights of market risks, policy risks, and natural and force majeure risks were 0.40, 0.35, and 0.25, respectively. These weights reflect the relative importance of different risk factors in the overall risk.

Table 1. Determination of third-level indicator weights.

I Indicator	II Level Indicator	III Level Indicator	Weight
Internal Risks (0.45)	Personnel Risks (0.35)	Employee Professional Quality Risk	0.25
		Event Planning Risk	0.20
		Emergency Handling Capability Risk	0.25
		Talent Turnover Risk	0.30
	Financial Risks (0.30)	Fund Shortage Risk	0.30
		Financial Budget Risk	0.25
		Cost Control Risk	0.20
		Event Revenue Risk	0.25
	Operational Management Risks (0.35)	Incomplete Management System Risk	0.25
		Decision-Making Process Risk	0.20
		Coordination Mechanism Risk	0.25
		Adaptability Risk	0.30
External Risks (0.55)	Market Risks (0.40)	Competitive Pressure Risk	0.40
		Consumer Demand Change Risk	0.35
		Pricing Strategy Risk	0.25
	Policy Risks (0.35)	Approval and Supervision Policy Risk	0.30
		Tax Policy Risk	0.25
		Subsidy Policy Risk	0.20
	Natural and Force Majeure Risks (0.25)	Industry Policy Risk	0.25
		Natural Disaster Risk	0.60
		Public Health Event Risk	0.40

4. Risk response measures for SMEs in sports event operations

To address internal risks, companies should focus on three key areas. First, for personnel risks, strengthening training and improving incentive mechanisms are essential. This includes developing a systematic training plan to enhance employees' professional knowledge, skills, and emergency handling capabilities, as well as establishing a competitive compensation system and clear promotion channels to boost employee loyalty and reduce turnover. Second, for financial risks, companies should expand financing channels, strengthen budget management, and optimize revenue structures. This involves seeking diverse funding sources, developing detailed budgets, and exploring additional income streams such as event-related product sales and live broadcast copyrights. Third, for operational management risks, improving management systems, enhancing decision-making scientificity,

and enhancing adaptability are crucial. This includes establishing clear internal management systems, making informed decisions based on market research, and developing flexible event plans with emergency protocols.

To address external risks, companies should also focus on three key areas. First, for market risks, strengthening market research and optimizing pricing strategies are important. This involves regularly conducting market research to understand consumer demands and competitors' dynamics, and setting reasonable ticket prices and sponsorship plans. Second, for policy risks, companies should closely monitor policy changes and actively communicate with government departments. This includes staying informed about policy adjustments and engaging with government staff to gain support and create a favorable policy environment. Third, for natural and force majeure risks, developing emergency plans, purchasing insurance, and strengthening cooperation with relevant departments are necessary. This involves creating detailed emergency plans, purchasing appropriate insurance to mitigate financial losses, and collaborating with meteorological and health departments to obtain early warnings and take preventive measures.

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