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## Book Part

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# Risk Identification in Sports Organization

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## Abstract

As the COVID-19 pandemic enters its third year and the economy continues to recover, it is clear that today's dynamic, unpredictable risk environment will remain. Due to the influence of other unexpected and changing sources of risks from the external and internal environment, situations arise that affect the fulfillment of set goals and the effectiveness of decision-making processes. This uncertainty underlines the need for prevention and the importance of risk management in sports organizations so that organizations can better prepare for potential crises. While in some countries (e.g., the USA, Australia, and others), it is common for the management of a sports organization to be aware of its serious (key) risks, this is not the case in Slovakia. The contribution aims to present the basic concept of risk identification for sports organizations to support sustainability resulting from the current requirements of practice in Slovakia and respect for world trends. The proposed concept's essence is identifying risks in connection with the application and significance of selected methods and techniques of risk identification. The proposed concept should focus on strategic management and establish responsibility for identifying risks to minimize the risks' negative impact. The benefit of the contribution is the strengthening of support for the application of risk management in sports organizations not only in Slovakia but also in neighboring countries. With a proper understanding and effective management of risks within processes and functions, sports organizations can anticipate emerging risks and increase the probability of achieving the goals of profit and sports success.

**Keywords:** risk; risk manager; risk identification; methods and techniques of risk management; sports organization

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## Introduction

Risk management becomes integral to all organizations as part of management systems. The negative development of the social and economic environment and the new risks associated with it are why it is necessary to develop tools to prevent the emergence of crises concerning the subject matter of each organisation. Sports organisations, given the nature of their operational activities, are currently particularly affected by the COVID-19 pandemic

Competing during the global pandemic required additional health tests, rules for limiting and tracing contacts, and other measures. These increased costs sometimes forced sportspeople to skip competitions and caused multiple events to be canceled or postponed. Most estimates have determined global losses for sports associations for 2020 in USD 50 to 65 billion. Although an unexpected tragic situation caused these extreme losses, the pandemic only highlighted the risk facing the sports sector every day "(Marsh, 2022)".

It is precisely the specificities of a sports product that are often the very source of risks. A sports product is a complex depiction of a tangible and intangible product which is also inconsistent from origin to consumption. The sports product is an integrated set of several elements that have their development and consists of, e.g., competition rules, sportsmen, fans, equipment, place and surrounding staff "(Mullin et al., 2014)".

It is the sports managers who, in addition to ensuring that the objectives set are met, must also take the public interest into account. The specifics of the environment in which sports organizations operate must also be considered when using management tools and procedures. One such specificity is the relationship with stakeholders (community and organization). The importance is obvious, especially in the form of a positive impact on young people's mental and physical health, youth education, or a change in the level of crime. The biggest danger for the sports industry is the influx and outflow of fan interest - fluctuations in both directions can negatively affect the entire industry. It is extremely difficult to predict this with certainty, and it can therefore be difficult to mitigate this risk. It has been confirmed that sports organizations that did not carry out the right basic activities such as planning, organizing, and leading had problems achieving their goals "(Wicker, 2017)".

Within the examined relations between sports stakeholders, the group acts as the basic unit of stakeholder relations management. The group can also be understood as a sports club comprising management, sportspeople, coaches, employees, children, and the like. Dealing with members' positions within the group can also bring various problems. One of the most important stakeholders for sports clubs is other sports clubs, fans, the public, partners/sponsors, and schools. One of the basic components of sports is rivalry, one of the basic aspects of the mutual relations of sports clubs. Within it, there can often be a change from competitive behaviour to aggressive and disrespectful behaviour "(Hoye et al., 2015; Ferenc, 2019)".

Another specificity is financing and sponsorship. The Act on Sports has the greatest impact on sports (Narodne novine, 2015, 2017). Through this law, the government redistributes funds among the various sports stakeholders. These stakeholders include, for example, sports associations. Sports clubs receive the most funding from households, sponsors, and donations. Only then are these funds from the state in the form of various contributions from unions, municipalities, or directly from the state. Municipalities have the largest share in the total financing of sports in Slovakia (therefore, they can be considered a very important stakeholder). For sports

organizations, sponsorship is a way to address the issue of resource constraints and the interconnection of rights (such as branding or know-how) with the sponsor "(Wicker, Breuer, 2013; Mullin et al., 2014)."

In Slovakia, the state significantly influences sports, especially through legislation. In 2015, Act no. 440/2015 Coll. on sport and the amendment of some laws introduced a calculation that determines the contribution amount to the national sports federations not based on subjective determination but from specific, measurable data. Significant negative interference in the original wording of the Sports Act was the exclusion of the two largest sports: football and ice hockey, from the formula for calculating the amount of contribution to recognized sports - regardless of results, popularity, or the number of active sportsmen, ice hockey is guaranteed 13% and football 17% of all funds of the budget chapter of the Ministry of Education, Youth and Sports of the Slovak Republic intended for sports "(Greguška, 2019; Ferenc 2019)".

Recently, social media has been an information medium for sports organizations which can be a source of positive as well as negative information for the general public which can lead not only to good reputation but also to dissatisfaction and bad reputation "(Tandon et al., 2012; Vlahovic et al., 2012; Johnson, 2011; Thilmany, 2012, Archer, 2013; Ferenc, 2019)".

From the analysis of the current state of the problem in Slovakia, it can be stated that there are several problems in this area within the relations between sports clubs and their stakeholders, which can be a source of risks. The main problematic relations include sports clubs, schools, the city, and the public. The financing of sports clubs from external sources also seems to be a problem. Every sports manager should therefore be able to respond flexibly to changes in the environment to achieve the set goals and ensure future development "(Masteralexis, 2012; Masteralexis et al., 2015; Ferenc, 2019)".

This is the prerequisite for effectively implementing risk management concerning risk identification, as the most important stage of the risk management process.

## Methodology

The paper intends to point out the importance of the possibility of implementing risk identification in sports organizations based on the analysis of the current situation. The paper aims to present the basic concept of risk identification for sports organizations to support sustainability resulting from the current requirements of practice in Slovakia and respect global trends. The essence of the proposed concept is the identification of risks in connection with the application and the importance of selected methods and techniques of risk identification. The proposed concept should focus on strategic management and establish responsibility for risk identification to minimize risks' negative impact.

The methodology of the paper was chosen following the set goal. Empirical research, analysis, synthesis, and data comparison were used to assess the current state and draw conclusions.

The paper deals with analyzing the current state of management of sports organizations. Subsequently, a list of the most significant risks was compiled, and a procedure for identifying the risks of sports organizations was proposed. It also includes the design of appropriate methods and techniques for identifying the risks of sports organizations and a description of their use.

## Results

### *Proposal of the concept of risk identification using selected methods and techniques for sports organizations*

Risk is most often considered the uncertainty of the influence of environmental factors on the functioning of the organization on the fulfillment of its goals. This risk means the possibility of a negative or positive deviation "(Hudáková et al., 2021)". The size of the potential threat is determined not only by the existence or size of the threat but also by the vulnerability of the sports organization, its weaknesses, and the extent of the possible damage. As the main goals of sports organizations are aimed at achieving sports success and financial sustainability, the most serious risks can be considered "(Varmus et al., 2015)":

- insufficient provision of sports success,
- Insufficient assurance of the financial sustainability of the sports club.

Based on the analysis of the current state of sports club management "(Dašić et al., 2020; Hrbek et al., 2020)", current practice requirements in Slovakia "(Pašuth, 2021; Slovak Sports Portal, 2021)" and respecting global trends "(Edgar, 2021; Grix et al., 2020)", a basic concept (structure) of risk identification for sports organizations aimed at strategic management with established responsibility for risk identification and minimizing negative impacts was created.

The assessment of the current situation reveals the following most serious risks of sports organizations which are affected by threats from the external and internal environment "(Varmus et al., 2020, MESRS SR, 2020; KMPG, 2017)":

#### Strategic risks:

- Risks arising from the club's management, e.g., executive players' insecurity, wrong strategy, managers' inability
- Competitive risks arising from competing clubs
- Legislative risks: non-compliance with sports laws, regulations, ordinances
- Criminal risks: property damage, cyber-attacks, reputation damage, extortion, fraud,
- Social risks: lack of interest of children in sports, insolvency of parents
- Economic risks: energy increase, property tax (stadium, gym, premises,
- Stakeholder risks from the perspective of sports associations, cities, schools, media, suppliers, players' agents, partners, the general public

#### Financial risks:

- Liquidity and profitability risks, cash flow.
- Risks arising from sources of funding: non-acquisition of funds - sponsorship, tickets, sale of players, rental of space
- Risks arising from expenses (costs) - player purchase, salaries, membership, rehabilitation, player care

#### Operational risks:

- Risks from the management's point of view (owner, boards, stakeholders, marketing, other employees): bad decisions, personal involvement, un-qualification
- Risks from the point of view of coaches - incompetence, insufficient authority, lack of motivation, underestimation of the situation, communication
- Risks from the players' point of view (the player is an employee): injury, accident, social insurance, mental health problems, insufficient preparation of the player after a career
- Risks from the point of view of fans, visitors, members (parents)

If sports organizations want to meet the set goals, they should pay attention to the identified risks and create space for risk management performed by the risk manager. Prevention should be part of the management of sports organizations, approaches that focus on analyzing failures, financial losses, and other negative events and preventing their recurrence. The experience of managers of sports organizations, the need to determine responsibility for risk management, and the creation of control tools are important for correctly applying risk management. Risk management should focus on assessment (identification, analysis, and evaluation) and risk reduction, as well as monitoring, reporting, and effective communication

Risk identification is the process of finding, recognizing, and describing risks. It includes identifying the sources, causes, and possible consequences of the risks. Each sports organization should do risk identification to identify risks, describe them and make a list of potential risks that could affect their achievements "(Sports Law, 2022)". Managers should ensure regular and continuous monitoring of all ongoing external and internal events that affect the achievement of objectives. For these events, it is necessary to distinguish between positive impact (opportunities) and negative impact (risks).

Main steps of risk identification for sports organizations:

- The first step is to process the identification of all sources of risks, causes of risks, and potential consequences that affect the sports organization and provide them with input assumptions for risk analysis. It is based on the conclusions of the previous stage, where all negatives, weaknesses, and threats can cause risks. It is very useful to perform causal analyses of the sequence of events which provides an opportunity to clarify the occurrence of an adverse event using various methodological procedures.
- The second step is to create a risk catalog (risk list). The risk catalog should serve as a structured record of significant potential risks based on events that could create, support, prevent, devalue, accelerate or delay the achievement of the goals of sports organizations, Table 1.

Table 1

Example of a catalog of risks usable for sports organizations

No.	Field	Risk	Risk description	Source of risk Cause	Cause of risk	Consequence of risk
1.	players	injury	...			
2.	coaches	insufficient authority	...			
3.	fans	property damage	...			
...	...	...	...			

Source: Author's illustration

Thorough risk identification is a prerequisite for successful risk management, as the unknown cannot be managed. Therefore, this stage of the risk management process is very important and demanding for sports organizations, not only in terms of time but also in terms of the availability of information "(Sadler, 2019)". The risk manager should focus on important areas when identifying the risks of sports organizations, e.g., environmental safety, stakeholder safety, operational safety, etc., to prevent injuries, conflicts, losses, and overall financial and legal consequences. The specific risks identified will vary depending on the sport, the nature of the sports organization, and its structure.

To identify risks, risk managers in sports organizations need to know and correctly apply methods and techniques in the risk management process "(Varmus et al., 2018)". The methods used to identify risks are different and usually do not serve only for identification. Their role is also in subsequent analysis and risk assessment while guiding for designing solutions. Some methods are narrowly focused and allow, e.g., only risk identification, while others are more complex and can be used in other stages of risk assessment.

Methods and techniques suitable for identifying the risks of sports organizations should make it possible to search for, identify and summarize risks. At this stage, we propose to identify risks using the following methods and techniques "(Hudáková et al., 2021)":

- Documentation and knowledge base assessments - the most commonly applied method for identifying risks in practice.
- Assessments of the values of key indicators of sports organizations (e. g., liquidity, performance indicators), e.g., by audit, ongoing control, development trends, and setting the tolerance limit of indicators - serve to identify risks.
- Brainstorming, Delphi technology, structured interviews and discussions with experts, and questionnaires - are used to identify risks, sources of risks, and causes.
- Checklists are an important tool that shows the direction of symptoms to determine the sources of risks and causes.
- Cause and effect analysis, human reliability analysis, and sensitivity analysis - are used to identify sources of risks (causes).
- Scenario analysis, what happens if - to identify unexpected risks arising from the company's external environment.

Internal audit can be used to verify the compliance of various documentation of sports organizations with legal, normative or other regulations. The audit results help the club's management to effectively fulfill its tasks, make decisions, and achieve the set goals. It maps the club's risk areas and assesses the effectiveness of risk reduction measures. Internal audit, on the one hand, provides the club's management with information on current risks; on the other hand, the size of the relevant risks is the basis for creating audit plans.

Brainstorming is often used in practice, so it can also be used in sports organizations. Based on experience, the more solutions available, the more likely it is that an optimal solution can be obtained. The aim is to introduce a common team method for the creative and efficient generation of many ideas in any chosen area. Brainstorming places great emphasis on imagination, so it is very important to identify risks where there is no data or where original solutions to the problem are necessary.

Checklists are a suitable means of identifying the risks in a selected area of sports organizations. They provide a continuous, up-to-date overview of the sports club's potential risks in its activities and the consequent potential impacts. Checklists are based on experience with past risks and are a suitable means of quickly identifying risks. They are implemented as questions or a list of critical topics, Table 2.

Cause and effect analysis (Ishikawa diagram) provides a structured view of the list of causes of the problem or identified risk in the form of a diagram. The team identifies the main causes, sub-causes, and root causes that negatively affect the analysed problem, i. e., consequences. In sports organizations, it can be used for a detailed analysis of a certain risk to eliminate the causes of its occurrence in the creation of risk reduction measures. It makes it possible to reach a consensus on the

most likely occurrence of causes, which can later be tested empirically or by evaluating the available data.

Table 2

Example of a checklist technique

**Checklist analysis**

**Name of the analysed area (activity):**

**Name of category, sub-area:**

<b>Control questions</b>	yes	no
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Source: Author's illustration

Structured interviews are useful when it is difficult to meet people or when a free group discussion is not appropriate for the situation or the people involved. Interviews are also a good way to identify risks for sports organizations. They are a means of providing stakeholder input into the risk identification process.

Human Reliability Analysis is used to systematically determine human errors and their causes, which may occur during normal operations or any activity in a sports organization. The method points to the danger of ignoring the failure of human error. It can be used qualitatively or quantitatively. Qualitatively, it is used to identify potential human errors and their causes to reduce the probability of error. It is used quantitatively to provide human failure data for other risk analysis methods.

Scenario analysis can be used to identify events that may occur in certain circumstances in sports organizations and to analyse the possible consequences and the likelihood of their occurrence. Scenario analysis can be used to predict how threats and opportunities might evolve. It can be used for all types of risk with short-term and long-term time frames. With a short-term framework and good information, a likely scenario can be estimated from the present. With long-term time frames and insufficient information, scenario creation becomes more creative and can serve as an analysis of the future. It allows the club's management to broaden their horizons into areas they would not have thought they could ever find themselves in.

The proposed methods can be used concerning the nature of the activities of the sports organization as well as the level of knowledge of management in the field of risk identification or overall risk management.

## Discussion

Changes in the business environment in Slovakia and the world are the source of several risks that managers must know and manage (e.g., the COVID-19 pandemic, the war in Ukraine, rising energy prices, etc.). This uncertainty underlines the need for prevention and the importance of risk management in sports organizations. This implies the requirements to create the risk manager position to effectively assess all key risks that threaten to fulfill the main objectives in sports organizations.

The prerequisite for effective risk identification is to capture all key risks of sports organizations using adequate methods and techniques. Proper identification of risks can bring sports organizations not only more likely to meet the set goals but also other benefits such as more efficient management of the organization, successful organization of sports events, achieving higher incomes, higher attendance of sports events, higher safety for sportspeople, visitors, sponsors, and employees, etc. In the paper, the authors identified the most serious risks of sports organizations and then defined appropriate methods for their identification.



The essence is that the responsible risk manager of the sports organization knows how to apply risk identification successfully and the entire risk management process and communicate the results effectively with the club management.

## Conclusion

It is important to take the right attitude to risks in sports organizations so as not to underestimate them, often based on a lack of theoretical knowledge and practical experience. The risk manager in a sports organization should know about risk management, be able to apply risk management methods and techniques, should have experience in the sport, and have the basic legal knowledge and good judgment.

The paper's contribution is to strengthen the support of the application of risk identification and the whole process of risk management in sports organizations not only in Slovakia but also in European countries. Based on the presented facts, the specifics of sports organizations and the product of sports organizations require great attention both in the identification of risks and subsequently in their assessment (analysis and evaluation) which will be the focus of our further research.

## References

1. Archer, S. (2013), "Digital distractions: Is technology supporting or threatening our well-being?" *IDEA Fitness Journal*, Vol.10 No.6, pp. 46-54.
2. Buganová, K., Hudáková, M., Lusková, M. (2021), "Risk management in sport organizations", *Crisis Management: scientific-technical Journal of Faculty of Security Engineering at the University of Žilina in Žilina*, Vol.2, pp. 64-72.
3. Dašič, D. R., Tošič, M. Z., Deletič, V. (2020), "The impact of the COVID-19 pandemic on the advertising and sponsorship industry in sport", *Bizinfo (Blace)*, Vol.11 No.2, pp. 105-116.
4. Edgar, A. (2021), "Sport and Covid-19. Sport Ethics and Philosophy", available at: <https://doi.org/10.1080/17511321.2021.1862478> / (05 Apr 2022)
5. Ferenc, P. (2019), "Riadenie vzťahov so zainteresovanými stranami športových organizácií." available at: [https://www.fri.uniza.sk/uploads/phd/69f-Dizertacna\\_praca\\_ing.Ferenc.pdf](https://www.fri.uniza.sk/uploads/phd/69f-Dizertacna_praca_ing.Ferenc.pdf) / (11 April 2022)
6. Greguška, I. (2019), "Vzorec na výpočet príspevku uznanému športu. Učená právnická spoločnosť." available at: [http://www.ucps.sk/VZOREC\\_Nahrada\\_subjektivneho\\_rozhodovania\\_politikov\\_a\\_priestor\\_na\\_neustale\\_zlepsovanie\\_vypoctu#InsertNoteID\\_47](http://www.ucps.sk/VZOREC_Nahrada_subjektivneho_rozhodovania_politikov_a_priestor_na_neustale_zlepsovanie_vypoctu#InsertNoteID_47) / (11 April 2022)
7. Grix, J., Brannagan, P. M., Grimes, H., Neville, R. (2020), "The impact of Covid-19 on sport". *International Journal of Sport Policy and Politics*, Vol. 13, No. 1. available at: <https://doi.org/10.1080/19406940.2020.1851285/> (05 Apr 2022)
8. Hoye, R., Smith, A., Nicholson, M., Stewart, B. (2015), "Sport Management". Florence: Taylor and Francis
9. Hrbek, P., Gábriš, T. (2020), "Is there a danger of the collapse of sports in the Slovak Republic? Rights and obligations of sports entities when banning sports events". available at: <https://www.olympic.sk/clanok/hrozi-kolaps-sportu-v-sr-prava-povinnosti-sportovych-subjektov-pri-zakaze-sportovych> (07 March 2022)
10. Hudáková, M., Buganová, K., Míka, V. T., Masár, M. (2021), "Integrated risk management system in the company. Žilina: EDIS - publishing center UNIZA.
11. Johnston, M., Paulsen, N. (2011), "The influence of club and sponsor images and club-sponsor congruence in the Australian Football League." *International Journal of Sport Management and Marketing*, Vol.9 No.1/2, pp. 29.
12. KMPG. (2017), "The concept of sports financing in the Slovak Republic", available at: <https://www.olympic.sk/sites/default/files/2021-01/KMPG-koncepcia-financovania-sportu-SR-2018.pdf> / (08 Mar 2022)

13. Marsh LLC. (2022), "Šport" available at: <https://www.marsh.com/sk/sk/industries/sports.html/> (11 Apr 2022)
14. Masteralexis, L. (2012), "Principles and practice of sport management". 4th ed. Sudbury, Mass.: Jones et Bartlett Learning.
15. Masteralexis, L., Barr, C., Hums, M. (2015), "Principles and Practice of Sport Management." 5th ed. Burlington: Jones & Barlett Learning.
16. MESRS SR. (2020), "The concept of state policy in the field of sports - Slovak Sport", available at: <https://www.minedu.sk/9027-sk/koncepcia-statnej-politiky-v-oblasti-sportu-slovensky-sport-2020/> (20 March 2022)
17. Mullin, B., Hardy, S., Sutton, W. (2014), "Sport marketing". Champaign: Human Kinetics.
18. Narodne novine (2017), Act no. 335/2017 Coll., Amendment to the Sports Act.
19. Narodne novine (2015), Act no. 440/2015 Coll., on sports and on the amendment of certain laws.
20. Pašuth, P. (2021), "The improving pandemic situation also made it possible to improve sports activities". E-Športinform 2/2021, available at: [http://www.sportcenter.sk/userfiles/file/Studovna/e-sportinform2021-02\\_cely.pdf/](http://www.sportcenter.sk/userfiles/file/Studovna/e-sportinform2021-02_cely.pdf/) (10 March 2022)
21. Sadler, J. M. (2019), "Implementing a Risk Management Program for Sports Organizations", available at: <https://www.sadlersports.com/implementing-risk-management-program-sports-organizations/> (15 Mar 2022)
22. Sport Law. (2022), "Risk Management for Sport Organizations and Sport Facilities", available at: <https://sportlaw.ca/risk-management-for-sport-organizations-and-sport-facilities/> (04 Mar 2022)
23. Slovak Sports Portal. (2021), "Central level", available at: <http://sport.gov.sk/page/centralna-uroven/> (07 Mar 2022)
24. Tandon, P.S., Zhou, C., Sallis, J.F., Cain, K.L., Frank, L.D., Saelens, B.E. (2012), "Home environment relationships with children's physical activity, sedentary time, and screen time by socioeconomic status." *International Journal of Behavioral Nutrition and Physical Activity*, Vol.9 No.1, pp. 88-96.
25. Thilmany, J. (2012), "Gaming pros and cons." *Mechanical Engineering*, Vol.134 No.3, pp. 20.
26. Varmus, M., Kubina, M., Soviar, J. (2015), "Cooperation on Sport Market – Reasons and Ways How to Improve It", *Procedia Economics and Finance*, Vol. 23, pp. 391-395.
27. Varmus, M., Kubina, M., Adamik, R. (2020), "Impact of the Proportion of Foreign Players' Appearances on the Success of Football Clubs in Domestic Competitions and European Competitions in the Context of New Culture", *Sustainability*, Vol.12 No.1, pp. 264.
28. Varmus, M., Kubina, M., Koman, G., Ferenc, P. (2018), "Ensuring the Long-Term Sustainability Cooperation with Stakeholders of Sports Organizations in SLOVAKIA", *Sustainability*, Vol.10, pp.1833.
29. Vlahovic, T.A., Roberts, S., Dunbar, R. (2012), "Effects of duration and laughter on subjective happiness within different modes of communication", *Journal of Computer-Mediated Communication*, Vol.17, pp. 450.
30. Wicker, P., Breuer, C. (2013), "Understanding the importance of organizational resources to explain organizational problems: Evidence from non-profit sport clubs in Germany", *Voluntas*, Vol.24 No.2, pp. 461–484.
31. Wicker, P. (2017), "Volunteerism and volunteer management in sport." *Sport Management Review*, Vol.20 No.4, pp. 325–337.

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