

RISK MANAGEMENT DURING SPORT PROJECT IMPELMENTATION

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Abstract

Risk is present in sport project management, large and complex sport projects with large external and internal influences are just some of the reasons to pay special attention to risk.

In sport project management, risks are mostly harmful, and when they occur they mainly affect increased costs and sport project delays. Despite all the measures we take, we cannot control the risk, which is an additional and biggest problem in risk management, which is why some authors equate uncertainty and risk.

Keywords: risk, management, sport project.

INTRODUCTION

The goal of every business system is to achieve the best results in a given time and space. Therefore, business activities are carefully planned using experience, engineering methods, and especially decision-making methods, and known and other relevant information that can be collected.

Every human activity carries with it numerous and different risks. Risk is the possibility of loss or poor outcome, or the degree of probability of such an outcome. Uncertainty is an estimate of the amount for which a calculated value may in reality differ from the planned value in conditions of uncertainty. Such an assessment is usually based on limited knowledge of phenomena (events), and is described by the assessor-planner or planning team by assigning a probability or probability distribution based on their knowledge. The ideal safe situation without risk would be one in which the risk would be equal to 0. Such a situation in reality generally does not exist and can only be a goal to which we can more or less approach, but we can never fully and permanently achieve it.

Every business system, as well as every sport project, has its specifics depending on the goals, organization, business processes, resources,

location, environment, etc. The most effective way to increase the security and reliability of the system is to reduce risk by improving the organization and process while increasing awareness of the state of the environment in order to timely change and change strategy and adjustments related to changes in the environment.

QUALITATIVE AND QUANTITATIVE RISK ANALYSIS

Increasing the efficiency and reliability of the business system and the quality of products and services significantly increases security and reduces risk because the size of risk and risk management is highly correlated with these methods. However, in this way we cannot solve all the risks, and especially not the external risks arising from the uncertainty in the environment. In developed business and other systems that already have all this, risk management is an additional systematized activity that, as an additional integrated upgrade, improves the operation of the system and through additional measures further reduces uncertainty and the risk of adverse events.

In systems, which have a low degree of application of the above modern methods, it is necessary to start as soon as possible the process of gradual coordinated introduction of risk management and other necessary methods that improve the quality, efficiency and reliability of the system. As a rule, the process of introduction (implementation) of risk management can in a short time show the priorities and the need for the introduction of modern management methods of all elements of the business and other organizational system.

Sport project risks represent a predictable deterioration in the overall efficiency of the sport project in conditions of uncertainty. Quantitatively expressed risk is the change of numerical indicators of the sport project: net present value (NPV), internal return (IRR) and payback period (PB). According to ISO 17799- The Information Security Standard (www.security-riskanalysis.com/introduction.htm). The basic approaches to risk analysis are quantitative and qualitative analysis. Quantitative risk analysis assesses risk based on the probability of occurrence of the event and the probable amount of loss, ie damage if that event occurs. The main problem with this method is the non-existence and unreliability of data on the probability of occurrence of events. In addition, the possible events to be analyzed are often interdependent and there is some correlation between them (Charvat, 2004).

Qualitative risk analysis is the most widespread approach to risk analysis. Qualitative risk analysis does not require probability data, but uses an estimate of the possibility of loss (damage). In the process of risk analysis, a number of interdependent elements are used (Jovanović, 2012):

Threat (danger)

These are phenomena that can go wrong and that can attack the system. An example might be fire or fraud. Dangers are present in every system.

Sensitivity (Vulnerability)

This makes the system much more vulnerable to attack or makes the attack much more likely to succeed or impact. For example, a fire will be vulnerable to the presence of flammable materials.

Control

There are four types of control as a countermeasure for sensitivity (vulnerability): control as a means of deterring intimidation reduces the likelihood of a free attack, preventive control protects vulnerabilities and makes the attack unsuccessful or reduces its impact, corrective control reduces the effect of the attack, Detective control detects an attack and activates preventive and corrective control.

DECISION MAKING AND RISK ASSESSMENT ON INVESTMENT SPORT PROJECTS

The investment sport project carries a variety of risks that are reflected in all phases of sport project implementation. Sport project owner - the investor has the greatest influence on the sport project and on the distribution of risks. Since the risk has its value, all participants in the sport project try to reduce their own risk, so there is a conflict of interest between them, which can increase the overall risk of the sport project. Therefore, coordination is needed between them and over them, which, realistically, can be most easily performed by the investor and the main contractor through a system of contracts and subcontracts, as well as management and supervision.

When contracting, the risks assumed by each individual participant in the sport project are directly or indirectly defined. The magnitude of the risk assumed is reflected in the increase or decrease in price. The actual ability of the participants to take the appropriate part of the risk is very important. Therefore, when selecting contractors and subcontractors, proof of qualification for a certain type and scope of work is required. The greater the reliability and the better the organization of the main contractor or subcontractor, the lower the risk borne by the investor or the main contractor.

Part of the risk is transferred to risk insurance, such as third party damage insurance, assembly insurance, facility and equipment insurance, human insurance, third party liability insurance (workers, subcontractors, etc.) in the event of insolvency and loss of employment, and other. Through the system of insurance premiums, based on monitoring financial solvency, statistical reports on occupational safety, control of implementation and improvement of organizational regulations, etc., sport project participants

are motivated to reduce risk.

Given that there is a very large number of risks as a factor of uncertainty and unreliability of the system, it is useful for any organization, and especially for a business organization engaged in sport project implementation, to make a general classification (systematization) of risks. The term taxonomy (laxonomy) appears in the literature.

Special importance is given to the taxonomy of operational risks, as risks arising from the operational operations of the system. In general, all companies have marketing (market) risk, risk of non-execution of the schedule and the risk of exceeding the sport project budget, and general economic risks.

Marketing risk is the risk of failure to achieve business results and profits due to a reduction in sales volume or price. The risk of non-execution of the schedule and the risk of exceeding the sport project budget through the delay of completion also affects the delay of exploitation and the reduction of production and sales revenue. The investor can compensate part of the loss from the contractor through penalties, if the delay was caused by the contractor.

General economic risks include a number of economic factors, the most important of which are usually changes in the value of currencies, interest rates, inflation and others.

Risk assessment is performed in the sport project planning phase using qualitative and quantitative analysis. If the sport project is approved for implementation, risk management is carried out. It is useful to collect and store risk data in the sport project archive so that they can be used in future sport project risk assessments.

Qualitative analysis provides a description of a number of uncertainties that occur in the sport project, the reasons for their occurrence and the risk of the sport project. Special logic maps and questions to help us identify risks also help. Risks are classified according to importance and possible losses. The most important risks can be subjected to quantitative analysis.

Quantitative analysis can be performed by the following methods (Jovanović, et al., 2015): Analysis of the influence of individual factors (sensitivity analysis),

Factor group impact analysis (scenario analysis), Imitation modeling (Monte Carlo method). In risk theory, there are numerous solutions to reduce risk and its consequences. SWOT analysis is an abbreviated name for risk analysis based on the following factors: STRENGTHS – strength; WEAKNESSES – weaknesses; OPPORTUNITIES–possibilities THREATS – threats

Analytic Hierarchy Process, AHP, is a methodology for multicriteria analysis and decision making developed by Thomas L. Saaty (1980, 1987). With the application of fuzzy logic (Fuzzy Logic (and Fuzzy Surplus Method)), this method can help to (Špundak, 2014): examines a complex problem and risks with a large number of possible solutions, evaluates and

prioritizes alternatives and organize information and assessments used in decision making.

To assess the value of the sport project with risk, the following are used: the present value method (NPV) and real options. Assessing and managing risks related to the duration of individual activities and the overall sport project is of growing importance. The time dimension of the sport project is very important, because one of the basic contractual obligations is the execution of works and the completion of individual phases and the entire sport project within the given deadlines. Given the complexity of sport projects and the multitude of different activities, as well as the existing practice, network planning techniques are increasingly applied. The most commonly used are CPM - Critical Path method, PERT - Sport project Evaluation and Review Technique, and other derived programs and methods.

SPORT PROJECT RISK MANAGEMENT

Risk is an unforeseen event that includes uncertainty and the probability that something unforeseen and most often undesirable will happen.

One of the definitions of uncertainty and risk is (Milošević, Pantakul, 2005):

Certainty - a situation under which we can accurately determine all the necessary quantities and all possible solutions. Risk - a situation in the future where there are several alternative solutions with a known probability of occurrence.

Uncertainty - a situation in the future where there are several alternative solutions and we do not know which will be realized. Sport project risk management includes a set of management methods and techniques that are used to reduce the possibility of achieving adverse and adverse events, and thus increase the possibility of achieving the planned results. The risk in the sport project is characterized by three key risk factors (Jovanović, Jovanović, Miletić, Berić, 2016):

Risk events (events that may adversely affect the sport project), Probability of risk (probability of occurrence); Size of stakes (size of loss incurred).

Coverage risk management (Jovanović, Jovanović, 2017): Continuous and system identification; Risk forecasting and assessment; Implementation and planning of selected actions and reactions that can contribute to risk reduction: risk ignoring, risk reduction, risk transfer, contingency planning; Finding preventive measures to reduce the risks that may arise in the sport project. In doing so, the costs related to these preventive measures must be considered and analyzed, and an assessment is made as to whether it is justified to incur such costs in order to reduce or not eliminate the risks that arise in the sport project.

Therefore, sport project risk management is a very complex process that can be represented through the following subprocesses: Risk identification,

which is the process of determining, classifying and ranking events that may have some detrimental impact on the sport project. Therefore, a division of risks is made in a general sense (Reiss, 2000):

Business risk - arises in the performance of business activities and may be the realization of profit or loss, Cyst risk - includes the occurrence of loss only, and we distinguish: direct loss of property (weather disasters ...), indirect loss of property (failures, damages ...), loss of responsibility (seeking compensation for injury to someone outside the company ...), personal loss (injuries of employees seeking compensation ...). Risk analysis, where a detailed analysis of individual risk events on the results of the sport project is performed through (Jovanović, 2012): research into the nature of individual risk events, analysis and assessment of the probability of occurrence of risky events, analysis of the interdependence of risk events, the impact of individual or groups of risk events.

Risk events identified in the identification phase are analyzed (high-risk events are analyzed in great detail). The initial step in risk analysis is to break down or structure the sport project into smaller parts or management levels, which is done using the WBS technique. This structuring is usually done down to the activity level, in order to get a clear picture of each activity, to identify all possible risks and all the interdependencies of risk events. The second step is to assess the identified risks. This procedure is performed with the help of certain quantitative methods, where first the probability of occurrence of a risk event is determined, and then the magnitude of the possible impact of the risk event on the sport project result. In more complex cases, the use of mathematical modeling methods, the use of computers and simulation methods are recommended. Risk analysis is justified due to costs only in those sport projects where there is significant uncertainty and a large amount of possible loss.

Risk response planning includes the following strategies (Reiss, 2000):

ignoring risk - a situation in which possible risk events are observed, but no action is taken, risk reduction - certain changes are made in the sport project in order to reduce the realization risk event and its impact on the sport project, but care should be taken that these changes do not significantly affect the defined global objectives of the sport project,

transfer of risk - a strategy in which we try to get rid of or reduce the risk by transferring part or all of the risk to another party or another person (by amending the contract where we are released from certain risk obligations or concluding a risk insurance contract) „contingency planning - a strategy for dealing with conditions of uncertainty and risk, which takes into account the specifics of each individual situation. It includes, above all, budget planning in conditions of uncertainty and the occurrence of risky events, but also the development of alternative action plans and reactions in exceptional situations. This planning envisages an accurate distribution of the competencies and responsibilities of the management structure for dealing with risk situations, and an assessment of responsibilities if a

particular risk event has caused damage to the sport project.

Reaction planning is the process of finding and defining management actions in a sport project that would minimize possible losses from a risky event. In addition to the application of individual strategies, there are also complex situations that require a combination of several different response strategies to be applied in the sport project risk management process. The risk in the sport project changes during the sport project implementation. The size of the risk in the sport project changes significantly if there are changes in the method of work. It is necessary that there is a continuous insight into the situation regarding the development of the sport project and that the necessary adjustments are constantly made in planning the reaction to risky events.

Control of the application of risk responses is performed to determine whether the planned responses are adequate and whether new responses should be introduced. Establishing a continuous risk control process implies that a continuous system of risk identification, risk assessment and development of strategies for responding to possible risks should be created. This means that during the course of the sport project, the planned strategies should be constantly adjusted to the new conditions.

CONCLUSION

It is a procedure that measures the size of the risk that can cause a certain loss, and also the impact of the occurrence of risk on the observed sport project.

There are several methods, one of which is considered here, which consists of a critical examination of the sport project in order to determine the type and degree of risk using certain questionnaires. This method determines the probability that the sport project will fail in achieving its basic goals.

According to this method, the assessment of the size of the risk is performed according to three criteria (Gareis, 2005):

Sport project flexibility (flexible investment - higher risk, inflexible investment - lower risk), Represented technology (new technology - higher risk, old technology - lower risk), Sport project size (large sport project - higher risk, small sport project - lower risk). □

These criteria depend on a number of factors that may influence so that the risk is assessed differently from case to case. These factors make it impossible to assess the risk in the sport project, based on the given criteria, in general, and these are: management style, company activity, personnel, time, different types of portfolios, different types of sport projects, etc.

Due to all of the above, it is necessary to have a continuous insight into the progress of the sport project and to constantly make the necessary adjustments and changes in the implementation of reactions to risky events. This means that there should be an organized system of monitoring and

control, whose task is to monitor the progress of sport project implementation and to permanently change and adjust planned actions and strategies.

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