

Triathlon Events

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The analysis of the world of sports may show the growing importance of amateur participation. However, some sports events (marathons, half-marathons and triathlon events) possibly should be seen as at least semi-professional due to their difficulty and the necessity for intense trainings. In the last several years the number of running and triathlon events has been dynamically increasing. The popularity cannot be understood as a mere fad as the effort required within preparations for such contests is extraordinary. Such participation entails a new life style and amounts to a sign of a major change of people's habits.

In light of the above mentioned the very fact of occurrence of an event cannot be enough to call it an organizational success. Nowadays the organizational expectations are growing in the face of the professionalization of sports events. Despite the attractiveness of local runs we may observe the centralization of events into cycles, substantial sponsors, triathlon corporations functioning as patrons of local undertakings.

The quality of the projects (e.g. sports events) is connected to compliance with specific criteria. Before establishing the scope of runners' and triathlons' satisfaction, though, it is necessary to define model quality criteria for an event. These criteria will be diverse and dependent on the specified event as well as runners' profile. The next step is the risk identification as the basis of the risk management.

The article deals with closely interrelated topics - the quality of sports events, participant satisfaction as well as risk identification and management of the events. In this regard participants who make systematically preparations determine the organization of events. On the other hand, the events are necessary to achieve the participants' planned results.

The verification of the quality of sports events and participant satisfaction requires establishing the complete scenario of the research – defining objectives, theses and hypotheses. The basis for that is risk identification realized from the point of view of event owners and

agement (including sports events) and presents the research conducted in a focus group whose aim was to identify the key risks for a successful sports event (a long-distance run, a triathlon contest).

Keywords: risk identification; risk management; customer satisfaction; triathlon event quality; quality management in sport; risk management in sport.

JEL Classification: M10, M12, M50

1 Introduction

Marathon and triathlon events have surged in number and participation in the last few years, and their popularity is growing in Poland in different social groups, both among young people and the elderly. Running is one of the easiest accessible forms of exercise, however, the distance of it is something that matters. Running events as all of sport categories provide structured opportunities to test performance goals, interact with other enthusiasts, celebrate physical accomplishment and thanks to it improve health, body condition and stamina. It should also provide an attractive and at the same time safe spectacle for fans, support and promote charitable projects, promote the city, its surroundings and region, lead to the development of sports sponsorship (Budner 2014).

Due to the necessity of a system approach to preparation for competing in such events, we talk about the professionalization of amateur running sport events in Poland. Similarly, an increase in the number of runners is reflected by the increase in the number of running events in which they may participate. Such events include long-distance races: 10 km, half marathons (21.095m) and marathons (42.195 m) organized in various Polish cities, all year round. This is evidenced by statistics and public calendars posted on websites devoted to running. In the past few years the number of running events grew by as much as 20-25% yearly [Waśkowski 2014]. For example, in 2015 in Poland there were 88 marathons held, in which 46 600 people managed to completed the run (an increase of 8.9% compared to 2014). For 2016 there are 95 marathons and as many as 70 triathlon planned in Poland.

...more frequently than many are to be seen as a central element of planning economic activity, managing projects and even making decisions in our private lives [Jajuga 2007, p.9]. Among numerous definitions we make an assumption that risk is a statement that something may go wrong, or an undertaking whose result remains unknown. [Kendall 2000, p. 54].

On this basis we can formulate two definitions describing risk:

Risk understood in the negative way (risk as a threat). In this approach risk denotes the possibility of obtaining an unexpected effect.

Risk understood in a neutral way (risk as a threat and an opportunity). In this approach risk denotes the possibility of obtaining an effect different from the intended one [Jajuga 2007, p. 9; Kaczmarek 2008, p. 257].

Authors of the present paper understand risk as the possibility of an event's failure related to participant's dissatisfaction. In general the authors do not focus on business risk of a triathlon event, however, while commenting the results some attention has also been paid to quality determinants linked with the budget available for organizers.

Risk is an integral part of any events, including sport activities, especially so demanding as a long distance run, and a run in combination with swimming and cycling like in the case of triathlon [Helms 2011]. That is why risk management is a fundamental component of managing an event and one of the primary responsibilities of the event's organizers. Unfortunately, it is often ignored or misunderstood, particularly by inexperienced planners, because they are unaware of their insufficient knowledge in some aspects, i.e. they do not know what they do not know. The same situation occurs with inexperienced participants of sports events.

What are the functions of risk management within the overall field of events management and the tools to perform these functions effectively? [Lieberman 2012].

Any event carries risks that are both known and unknown to the organizer and a sports event participant. While event directors are responsible for assuring the safest conditions possible, participants have an equally important responsibility to ensure activity readiness. While the management of known risks seems like an obvious step in the event planning process, there are additional responsibilities that race directors should take into account risks that cannot necessarily be anticipated.

There are many risks that are known to race directors such as hazards along the course, traffic, terrain, or obstacles, as well as participant management - giving proper instructions (run only along designated course routes), enforcing age parameters, and equipment requirements such as proper footwear. [Murphy 2009].

running race, considering that the activity area encompasses several kilometers rather than being neatly contained within a field or court. Participant injury or emergency plans should be carefully outlined and documented in advance and should contain the indication of kinds of first aid equipment that will be provided as well as aid locations, the ways of equipment transportation, if needed, to a particular location on the course etc.

Weather conditions involving heat, cold, or precipitation have unique considerations that should be addressed. Not only should event directors make special provisions to reinforce course safety or participant aid during adverse weather conditions (such as providing extra water on the course in hot conditions), but participants should also be made aware of any special needs brought about by such conditions (such as informing participants of water locations). [Murphy and Connors 2008].

Other risks in amateur sports events cannot be as easily known or anticipated by their directors. Such unknown risks include a participant's knowledge of his or her own health. Most deaths during marathons are the result of congenital heart conditions that participants themselves were not aware of. Other considerations of unknown risk include the fitness and readiness levels of participants. This element is especially important given the increasing emphasis on running as the activity for all ages and abilities. Event participants should be made aware of the risks of vigorous exercise as well as the specific risks associated with the race distance. Participants should also acknowledge that they are adequately prepared to the best of their knowledge. This information should be made available in participant waivers and should be re-stated during a pre-run briefing before the event start. [Gosling 2011].

Furthermore, run directors should consider the appropriateness of liability insurance coverage for their specific event. Race directors should check with their organization's legal counsel to determine their specific insurance needs. [Santana-Cabrera and Santana-Martín 2015].

All recreation organizations should engage in a continual process of examination and review of their existing events and risk connected with it to ensure that the environment is safe for participants, officials, volunteers and spectators. [Nerurkar 2012]

A failure to assess the risks involved in events can be disastrous as a result of:

- Loss of reputation;
- Financial loss;
- Damage to facilities;
- Injury to participants;
- Over-stressed workers;
- Loss of equipment;

stage the event.

The feasibility analysis should aim to identify any risks such as:

- The sufficiency of lead time (years, months, weeks) to organize the event;
- The date of the event and whether it clashes with any other events that may significantly affect the success of the event;
- The budget and whether the event can be run without incurring a loss;
- The degree of support that can be gained from the community, government, and parent bodies;
- The sufficiency of resources such as equipment, manpower, finances and facilities;
- The environmental impact and whether the event may cause a disturbance to surrounding community, and cause traffic congestion, waste, noise, and lighting spillage;
- The legal considerations such as permits, landholders permission, alcohol licensing, fundraising regulations.

In addition to the abovementioned, there need also to be a thorough examination of risks to human safety as sports events are inherently hazardous. It is the first and foremost duty of all event directors to implement strategies to ensure the safety and well-being of all event-goers. This responsibility even extends to a consideration of the risks involved if parents who are spectating fail to keep control of small children. For example, small children may be injured in the spectator stands by running and jumping from aisle to aisle, step to step and seat to seat. [Stokell 2014].

Risks to health and safety associated with events include:

- Surfaces that are not even, slippery, or have potholes, and which may cause participants or spectators to trip, slip and fall;
- Projectiles that are used during an event including balls, pucks, discuss, javelins;
- Obstructions that people may run into or hit the head on;
- Food hygiene and health safety;
- Competitive aggression resulting in brawls, abuse, harassment.

Accidents resulting in an injury are frequent in events, and event organizing committees will not be held responsible provided that a reasonable attempt to identify risks has been made, and strategies have been put in place to mitigate these risks. In short, the event organizing committee needs to be seen to have done a reasonable job in risk management. [Fitzgerald 2014]

A risk management plan is an essential aspect of planning any event.

It identifies all the potential risks that may arise from holding an event and then lists the steps event organizers will take to reduce or mitigate identified risks.

- cause damage to equipment, infrastructure or the event site, or
- harm the future of the event organizing committee and event itself.

Surely many risks are out of the event organizer's control. In this case it is important that the risk management plan details who is responsible for coordinating the safety of every person and what should be done if something that is out of the control of the event organizer occurs.

A risk assessment should consider:

- existing risks of the site;
- risks the event creates;
- external risks that the event organizer has little control over but may need to be managed at the event.

A risk assessment of the event site embrace considering the following questions:

- Will there be moving vehicles near the event site and could this pose a risk to pedestrians?
- Is there anything on the site that could become dangerous if there is inclement weather?
- Is there a body of water on or near the event site?

A risk assessment of the event and all proposed activities involves the following issues:

- Will there be a jumping castle or carnival rides at your event and how will the safety of event guests be ensured when on or near rides?
- Is there infrastructure being brought onto the event site? Who will ensure it is safely secured?
- Are you bringing vehicles on site and if so how will you manage the safety of people who are setting up near vehicles?

A risk assessment of all external risks includes considering the following questions:

- In the event that an evacuation of the event site is required who is responsible for ensuring that all people are calmly and safely moved?
- Are the likely guests at your event at a higher risk of requiring emergency services? If so have you advised local emergency services?

A complete risk management process before the event should include:

- The initial risk assessment;
- The developed Risk Control Plan;
- An Emergency Management Plan;
- Traffic Management Plan – where applicable;
- Waste Management Plan – where applicable;
- Site safety induction checklists – for staff working on the event or site.

It is important to remember that every event is different and has different resources available.

3 Research characteristics

Authors of the present article conducted preparatory research which according to the assumed plan should precede proper research planned for 2016. The aim of the research was the identification and evaluation of the significant of risk factors related to organizing and participating in a triathlon cycles held in Poland over the period of 2012-2015. The research allowed carrying out initial risk factor assessment of the identified risk factors. Consequently, it will enable the improvement of preparing sports events.

The research was planned and realized in three stages:

Identification of risk factors linked with organizing and participating in a triathlon event

Verification of risk factors and grouping

Assessing the significance of risk factor groups and conclusions.

The identified risk factors were grouped and assessed. Therefore, the following elements were subjected to assessment:

- Relevance of a given factor;
- Belonging to a specific group of risk factors;
- Significance of individual risk factor groups.

Within the first stage of the research all risk factors were identified on the basis of professional literature and the authors' experience. Risk factors were also grouped for the sake of clarity and enabling effective work for experts.

The research was conducted in the group of 10 experts, among whom 5 were representatives of organizers and 5 were representatives of participant in a triathlon cycle of events. Due to their experience they realized research tasks with the use of the Delphi method. The authors of the present paper prepared a list of risk factors and grouped them with the use of the Ishikawa diagram. In such a form the materials were distributed among the research participants who shared their opinions – they confirmed the significance of some risk factors or described them as inadequate. They also placed stress on some elements as well as additional risk factor groups. After due modifications the material was sent to the participants once again. With some experts remarks were exchanged several times.

The third stage of the research was the assessment of significance from the point of view of risk resulted from separate risk groups. The assessment was realized with the use of the ABCD Suzuki method. Due to the fact that the focus group included representatives of organizers and participant of triathlon events, we may state that the research results indicate their common view within this scope. Therefore, the results undoubtedly will be important for both interested parties because of their interests.

of specific risk factors (not only in reference to groups which are stipulated).

4 Characteristics of the research method

The cause-and-effect Ishikawa diagram is a graphical method which allows order occurring irregularities and mutual connection of the causes with the use of a chart. It is often used in a more general way in order to arrange the causes of a problem or issues linked with a given subject. Its essence is the graphical presentation of the analysis of mutual interrelations of causes at the root of a specific problem [Smith 1998]. It works perfectly in teamwork when combined with other quality management tools and techniques, e.g. brainstorm. It is said to be a hierarchizing tool whose main aim is to support locating the cause of a problem of our interest. The Ishikawa diagram is often called a fishbone diagram because of its graphical appearance. It is important to indicate interrelations within cause groups which is realized on the basis of standard groups, or individual groups which are dependent on the specificity of the analyzed matter. In the case of the present research the Ishikawa diagram was used in order to depict all risk factors mapped out on the basis of professional literature and the authors' experience. Subsequent versions of the diagram were prepared on the grounds of the results of sessions carried out with the use of the Delphi methods. [Łuczak, Matuszak-Flejszman 2007, p. 60-63]

The Delphi method is an expert method [Kędzior, Karcz 2007, p. 120], which may be used in order to develop long term forecasts relating to a selected problem or a phenomenon [Stępowski 1977]. The Delphi methods belongs to the group of research methods and opinion analysis. Due to the preparation of a scenario for future event in the course of the research it is also seen by some specialists as heuristic method [Antoszkiewicz 1990, p. 212-223; Lisiecki 1997, p. 110; Mikołajczyk 2002, p. 105]. In professional literature there are several types of the Delphi method mentioned, *inter alia* SEER, PROBE, SOON [Głowacka 2000]. The Delphi method was invented in 1950s', however, it is difficult to attribute this achievement to a single person [Łuczak 2008, p. 218-219]; some sources indicate O. Helmer and N. Dalkey from RAND Corporation. [Łuczak 2008, p. 218-219] The method as created as a result of increasing interest in statistical opinion analysis popularized in 1960s'.

The Delphi method consists in sending questionnaires to experts who are supposed to share their opinion about the expected course of actions. During research the identity of experts is not revealed, they must not communicate with one another which eliminates authority influence and persuasion. Furthermore, the most radical opinions are rejected which boosts the impartiality and objectivity of research results. Contrary to brainstorm, in the Delphi method group

All participants of the research were asked to assess the significance of risk factor groups which was realized with the use of the ABCD Suzuki analysis. This method is a very simple and commonly used (in particular in the works of Japanese quality groups) tool which allows defining the significance and caliber of specific causes. The basic assumption of this method is active participation of a carefully selected team of session participants so as they can present the full within a given scope together. Team members should be specialists in their fields, know the analyzed problem from their practice. Moreover, they should be properly trained in the area of applying quality management tools and techniques as well as they ought to be motivated to work [Łuczak, Matuszak-Flejszman 2007, p. 60-63]. The application of the method consists in the individual assessment of factors, in the case of the present research the assessment related to risk factor groups in the context of organizing triathlon contests. After having realized the individual assessment a collective assessment form is prepared. In the present case the 1-10 scale was used where a higher number means bigger significance of a given factor group.

5 Research results

The first stage of the research was defining risk factors for the success of a triathlon contest as well as risk factors relating to participant satisfaction on the basis of professional literature. Thus, dozens of sources, monographs, papers as well as mainly elaborations, reports and comments linked with sports events, including legal requirements related to organizing mass sports events, were analyzed. The result of the work was presented to expert evaluation. First, the experts verified risk factor groups and their component elements. As a result of this stage, 13 groups and over 100 risk factors were identified:

- **Medical safety** (demanding medical certificates, participant declaration, accessibility of medical help points, accessibility of ambulances, medical consultation possibility, medical support on the swimming course);
- **Organization straight before the contest** (access to transition zones, deposit, toilet accessibility, organization of the start area, accessibility of information, assuring protection from unfavorable weather conditions, possibility of taking a shower, a parking lot);
- **Swimming course** (time measurement, attractiveness of the course, number of participants hindering the swim, width of the course, water cleanness, water temperature, division into starting waves, comfortable start);
- **Cycling course**: time measurement, attractiveness of the course, number of participants hindering the ride, technical support, width of the course in light of the number of participants, surface quality;

- the completed distance, information about the time;
- **Transition areas:** distance to cover a given stage, difficulty of finding your rack space, ample space for a bike and other items, organization assuring even chances for all participants, access to toilets;
 - **Organization of the post-race zone:** accessibility for non-participants, beverages, catering in the finish area, organization of the finish area, possibility of massage, pools with water, access to showers, access to the deposit;
 - **Organization of distributing start packages and expo:** accessibility of volunteers, information accessibility, number of exhibitors during the expo, location;
 - **Personal data protection:** unambiguity of information within the scope of data security, demanding participant declaration, free access to data, possibility to modify and cancel;
 - **Post-race information:** photographic/video services, information about next contests,
 - **Participation costs:** admission, traveling costs, costs related to the necessary outfit, accommodation costs before and/or after the run;
 - **Packages and medals:** a start package, the price of the package, a rich package, a rich package/reasonable admission, a bib, a medal, designing the medal;
 - **Participant self-organization:** satisfaction from the preparation of the run, conscientious realization of the training plan, presence of relatives, favorable weather, festive atmosphere, big number of participants, popularity of the run, support from measurement devices (e.g. a watch, a heart rate monitor, a pedometer, GPS), mood and attitude (independent of the run), listening to music during the run, adequacy of outfit for the weather conditions, using mobile applications during the run, using energy gels, using isotonic beverages, diet prior to the run).

Expert opinions were based on the data presented in the form of the Ishikawa diagram. Consequently, there were a dozen or so versions of the analysis. Next, factor groups were evaluated in the context of their significance with the use of the Suzuki method – first by each expert individually and then their assessments were gathered in the collective form. Figure 1 shows the results of the third stage of the research.

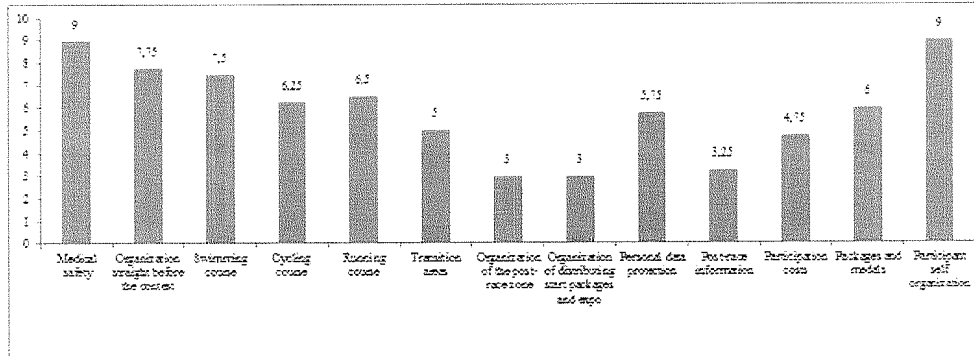


Figure 1 Assessment of risk factor groups relating to triathlon events (Source: own research)

Among factor groups with the biggest uncertainty we include medical support and participant factors. The former received the top value from almost all representatives of organizers which is surely linked with the sense of responsibility. However, despite the fact that triathlons did not take this aspect for granted, they did not consider it overly significant. Event participants gave top values to participant factors. It stems from the fact that they take part in the events mainly for realizing their own goals, and thus, their realization is seen by them as mostly the matter of their performance

5 Conclusions

The present paper presents the results of research conducted in the context of triathlon event risk assessment. In light of the planned global research conducted among organizers and participants the presented research may be seen as preparatory and trial. The research indicated the most significant factors, i.e. safety factors and participant factors, including the realization of training plans, diet, motivation etc.

The proper research will aim at assessing the significance of risk factors, and not only risk factor groups. In addition, the results of the presented research unequivocally prioritize the organization of triathlon events.

prehensive and will have to be addressed at a more personalized and detailed level for each particular event.

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