

Logistic Organization of Mass Events in the Light of SWOT Analysis- Case Study

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Abstract – Rzeszow Juwenalia is the largest free-entry student event in Subcarpathia, and, at the same time, one of the best in Poland. On average, more than 25,000 people stay on the campus of Rzeszow University of Technology for every single day of the event. Such an enormous undertaking requires developing a strategy which will make it possible to design and coordinate the event effectively. In connection with that, the principal objective of this paper is to present the strengths and weaknesses of Rzeszow Juwenalia, and also to attempt to verify opportunities and threats related to the event. SWOT analysis was used in order to attain the adopted objective. With the use of it, results making it possible to conduct a detailed assessment of the undertaking were obtained. In the publication were presented proposals of improvement activities which may be implemented in the future.

Keywords – mass event, logistics, SWOT analysis

1. Introduction

There is no doubt whatsoever that mass events constitute a very important element of the life of a society. Nowadays, entertainment is not their only purpose, since, as well as this, they are also used for the promotion of science or, for instance, to conduct

a charitable activity [15]. According to the information provided by the General Police Headquarters in Poland, every year there are more than seven thousands of mass events that are organized. In the year 2016, the number of them amounted to 7,562 [4].

In the literature of the subject, the issues of the quality and innovativeness of the products or services having a commercial character, however, there is still no sufficient information about research into, and the analyses of, mass events quality and security [14,16,20]. Therefore, it seems to be significant to conduct the analysis of the strengths and the threats which may occur in connection with their organization.

This paper is devoted to presenting the strengths and the weaknesses, and also the opportunities and the threats, which are connected with the organization of an event constituted by Rzeszow Juwenalia. In order to accomplish the adopted objective, a method combining both the internal analysis, and the external one, of the environment of the organization, referred to as SWOT analysis, was adopted [8].

Rzeszow Juwenalia constitute the perfect instance of a mass event. Within its scope, the project includes a number of events: cultural, sports, scientific, and also entertainment ones. This paper is principally concentrated upon the organization of 'Grand Final Concerts', which constitute the greatest logistic and organizational challenge. The event, which is organized on the campus of Rzeszow University of Technology, is not regulated by the provisions set forth in the Act on Mass Event Security. This fact is principally connected with the autonomous character of the Higher Education Establishment [1]. In spite of that fact, out of concern of the high quality of the event, and also of the security of all the participants in it, the organizers adhere to the provisions set forth in the Act, and connected with preparing the venue, and also ensuring the appropriate number of order-keeping services, informational and medical security services.

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This paper has been written upon the basis of the materials made available by the organizers of Rzeszow Juwenalia, and also upon the basis of the knowledge and experience of the authors acquired in the course of organizing the event in question for several years. The conducted analysis may, therefore, be taken strength of in practice, and constitute a valuable guidelines for the future organizers of the event.

2. Mass events and the logistic organization of mass events

In accordance with Polish legal regulations [1], mass events have been defined as artistic-entertainment events, or the sporting ones, including football matches (however, it is not applicable to events organized, among others, in theatres, opera houses, cinemas, libraries, or, for instance, schools).

For ensuring the security at a mass event, the following are responsible: organizer, self-governmental authorities, and that means: a voigt, a mayor or a voivode. In addition to that, this responsibility is shared by: health service, Police, State Fire Brigade and the different organizational units of anti-fire protection, and also different services responsible for security and public order.

Security of the events of this type is an extremely complicated process, and it constitutes an enormous challenge for all organizers. Not only does it require following the regulations set forth in Act of 20th March, 2009, the security of mass events, but, as well as that, adhering to a number of different acts [2].

The responsibilities which have to be fulfilled by the organizer of an event include:

- complying with the legal requirements, concerning, in particular, regulations set forth in the construction law, the sanitary regulations, and the regulations concerning anti-fire protection;
- ensuring the participation of information services, the order-keeping services and the security head managing the activities of these services;
- ensuring medical assistance, and also providing medical facilities;
- providing hygienic-sanitary facilities;
- marking evacuation roads, and also roads making it possible for the vehicles of rescue services, and also the order-keeping ones (police, armed forces, etc.), to reach the venue of the event;
- ensuring the appropriate level of the exchange of information by means of organizing appropriate communication between the bodies participating in an event security;

- providing rescue equipment, and also the fire-extinguishing one, indispensable for the purpose of a mass event security in the aspect of rescue activities, and also the fire-extinguishing ones;
- ensuring a separate room assigned to be used by services in charge of a mass event security.

Analysing the tasks of an organizer, it is possible to ascertain that a logistic organization has a crucial role in the organization of mass events. Ensuring the appropriate preparation of an undertaking determines the success of it. The logistic organization of a mass event is the field including planning, preparing, using and transfer of entities, and also individuals and energy, as well as information, to meet the objective of accomplishing a desired level of security, the satisfaction of participants and conducive conditions of the work of the organizers [11].

Ensuring the maximum level of customers' satisfaction is nowadays becoming the fundamental task of every organization aiming to develop and improve its position in the market [13,19]. The overriding objective of the organizers of a mass event is achieving the satisfaction of the participants in it in terms of providing services, and also security [17]. Safe and effective conducting of logistic and organizational activities in the course of mass events ought to be adjusted to the possibilities and the resources of an organization [6,7]. For that very reason, the organizers of mass events in many cases use the services of external companies, which may fulfill the requirements set forth in the legislation, and also those of potential participants in an event, in a way which is more professional and cost-effective.

It ought to be borne in mind that the correct and safe course of an event is dependent not solely upon the organizers, or, for instance, the public administration. As well as those factors, the weather conditions, or, for instance, the behaviour of the participants in an event themselves (and they frequently contribute to occurring dangers to a significant degree), are very important [5,9].

3. Characteristics of Rzeszow Juwenalia

Throughout the recent years, Rzeszow Juwenalia has achieved the position of the greatest student holiday in the South-East of Poland. This project has been divided into three weeks: 'Week: Culture and Science Come First', 'Sporting Warm-up', and also 'Grand Final Concerts'.

'Week: Culture and Science Come First' is a series of meetings, lectures, talks, and also shows in the cinema, or concerts in the concert hall. These events provide students with the possibility of presenting

their abilities, talents, and also passions, by means of participation in numerous contests and competitions.

'Week of Sporting Warm-up' encourages students to engage into physical activities, and also to put to the test their abilities in sporting competitions. Fitness contests are organized in different sports. In the sporting competitions participated not only the Academic Sports Associations, but, volunteers that are not competitive sportspersons as well.

„Grand Final Concerts” is three days of concerts, intertwined with contests, and also numerous attractions. In accordance with the tradition, “Grand Final Concerts” commences in the Square of the city of Rzeszow, from which a pageant sets off in the direction of the residential facilities. The performances of ensembles, bands and groups commence right after the pageants reach the stage, and last for three days. Additional attractions are specially prepared second stage, the so-called Pewex Stage, night-time clubbing zones, an adrenaline zone with bungee and a climbing wall, or, for instance, specially-prepared kart circuit, and also catering facilities [3].

An undertaking as enormous as Juwenalia requires, therefore, an appropriate approach in terms of logistics and organization. The discussed course of action is closely connected with the activities described in the so-called Deming Circle. The course of action in question is based upon the four original fundamental functions of management, and that means planning, implementing, control, and also perfecting, which facilitate the more effective and cyclical implementation of a project.

4. Processing the results of the analysis

Rzeszow Juwenalia is an event, which, on the one hand, builds a favourable image of the city and the Higher Education Establishment, whereas on the other hand constitutes a real challenge not only for organizers, but also for the population and for the local authorities, which struggle with numerous inconveniences and limitations every year.

Table 1. presents the SWOT analysis of Rzeszow Juwenalia, in which the strengths and the weaknesses of the undertaking, as well as the opportunities and the threats, are presented.

Table 1. SWOT analysis of Rzeszow Juwenalia

Weight	Index	Internal factors	Weight	Index	External factors
1.0	S	strengths	1.0	O	opportunities
0.35	S1	well-integrated team	0.35	O1	assistance of external companies
0.30	S2	assistance of the authorities of the Higher Education Establishment	0.15	O2	small number of the events of this league in the region
0.20	S3	venue of the event	0.25	O3	the youth of the population of Rzeszow
0.15	S4	collaboration and involvement of volunteers	0.25	O4	developing infrastructure
1.0	W	weaknesses	1.0	T	threats
0.35	W1	insufficient experience of the organizers	0.45	T1	dependence upon the weather
0.25	W2	frequent changes of the organizers	0.30	T2	behaviour of the crowd
0.25	W3	splitting competences among the Rectors	0.20	T3	situation in the market
0.15	W4	the absence of fences around the venue	0.05	T4	terrorist attacks

As the strengths of the project, the following may be considered:

- well-integrated team (S1) – a well-chosen and integrated staff of organizers is the foundation of accomplishing the objectives in the case of every single project;
- assistance of the authorities of the Higher Education Establishment (S2)– the support and assistance of the authorities , and also employees, of the Higher Education Establishment is significant at virtually every single stage of building and implementing the project;

- venue of the event (S3) – an appropriately chosen venue with the access to power supply network, and also water and sewage system, solves a number of problems and makes it possible to economise on time, and also to reduce costs;
- collaboration and involvement of volunteers (S4) – support of the group of voluntary workers makes all the actions more effective, reduces the time of performing organizational activities, and also, in addition to that, reduces the costs of the implementation of the project;
- frequent changes of organizers (W2) – the high rotation of the organizers, resulting from graduation, requires training, and also inducing ever new staff, in the project;
- splitting competences among the Rectors (W3) – annual meetings with the representatives of the Higher Education Establishment co-organizing the project result in it being indispensable for negotiating the conditions of collaboration;
- the absence of fences around the venue (W4) – causes the necessity of fencing the venue of the event, which significantly increases the costs of the project;

Opportunities of the undertaking include, among others:

- assistance of external companies (O1) – the possibility of using the experience of external companies makes it possible to shorten the time needed for preparations, and also provides the possibility of rapidly detecting problems and reacting to them;
- a small number of the events of this league in the region (O2) – a small number of similar events in the region exerts a favourable influence upon acquiring sponsors;
- the young population of the city (O3) – the young population facilitates reaching the target group of the event by means of appropriate preparation of the promotion of the event, for instance, in social media, which constitute one of the fundamental tools of communication amongst young people [10,12];
- developing infrastructure (O4) – high levels of investment in the region facilitate using city and region public transport making it easier for participants to reach the venue of the event;

The weaknesses of Rzeszow Juwenalia are presented as follows:

- insufficient experience (W1) – the absence of experience results in the necessity of training the staff, which generates costs, extends the time of the preparations in the project, and also increases the risk of the occurrence of problems;

Among the threats of the project, the following may be included:

- dependence upon the weather (T1) – the absence of possibility to forecast the weather several months in advance makes it more difficult to make decisions concerning the location of the particular zones of the festival, and also, in the case of precipitation, increases the risk that the turnout of participants will be low;
- behaviour of the crowd (T2) – the behaviour of the participants in the event themselves, frequently contributes to the occurrence of dangerous situations to a significant degree;
- situation in the market (T3) – the complex chain of circumstances exerting a significant influence upon economic conditions limits the scope of what organizers can do;
- terrorist attacks (T4) – it is claimed nowadays in Poland that we are not under an immediate threat as a state, however, it is impossible to exclude it entirely that our country will attract the organizations conducting such attacks.

In the further part of the research, the collected data have been subjected to an analysis (SWOT/TOWS), in which, with the application of contingency tables, the correlations between the discussed areas were verified. Table 2. presents the collation of the collective results of the analysis.

Table 2. Collation of the collective results of SWOT/TOWS

Combinations	Results of SWOT analysis		Results of TOWS analysis		Collective collation of SWOT/TOWS	
	sum of interactions	sum of products	sum of interactions	sum products	sum of interactions	sum products
strengths/ opportunities	12	3.25	20	5.2	32	8.45
strengths/ threats	18	3.95	10	2.45	28	6.4
weaknesses/ opportunities	8	2.2	6	1	14	3.8
weaknesses/ threats	18	4.25	20	5.35	38	9.6

Analysing the results obtained in Table 2., attention ought to be paid to a high indicator of correlations between weaknesses and threats. The frequent changes of organizers, and also the insufficient experience of individuals working on the festival, to a significant degree may exert influence upon weakening the position of the event. An efficient transfer of information is revealed to be the key to success in that case. Forwarding documents, and also guidelines, to further organizational staffs, means not only economizing on time, but makes it possible to avoid mistakes made in the future.

Behaviour of the crowd is another threat connected with the course of the event. Problems may be connected with, among others, transport (for instance, traffic jams), problems with supporters/particular participants, noise, or, for instance, with disorder. In addition to that, the principal critical points of a mass event may, beyond doubt, be defined as the entry/exit zones. The appropriate marking of them, and also their patency, makes it possible for the crowd to move smoothly in the course of the event. It is a very important issue as well, to mark evacuation and access roads. It is only thanks to those elements that it is possible to provide participants with the possibility of entering and leaving the venue without problems, and, if a threat does occur, to be evacuated safely.

Another important issue which ought to be researched in depth in the course of the analysis of the event is the possibility of terrorist attacks. In the recent period of time, this form of threats has been discussed more and more frequently in Poland. It is maintained that we are not a state under the immediate threat of that plague. However, observing the situation in the world, it is impossible to exclude such an event entirely. Knowledge about the character of a danger resulting from terrorist attacks plays a crucial role in anti-terrorism prophylaxis. Frequent changes of the organizers of Rzeszow Juwenalia, and also their insufficient experience in addition to that, may increase this threat. In such a case, the assistance of the authorities of the Higher Education Establishment, and also external companies, is crucial because it may to a significant degree reduce the results of mistakes and problems of the young organizers.

The greatest problem of the organizers, which has a fundamental significance for the course of the event, is the fact that the event is dependent upon the weather. Even a smallest rain, or a quickly passing thunderstorm, may exert a significant influence upon the lower turnout of participants. In such a case, the ground on which the event is organized, has an enormous significance. The campus of Rzeszow University of Technology is revealed to be the appropriate venue due to possessing a hard ground.

When there is precipitation, the comfort of moving on it is at a much higher level.

Analysis of Table 2. makes it possible as well to notice a high indicator of correlation between strengths of the organization and the opportunities originating in the environment.

The assets of the organization are, first and foremost, a well-integrated team, and also the assistance of the authorities of the Higher Education Establishment, and of the volunteers. Coordinating a mass event requires that the organizers possess particular competences, and also experience. It is important that, at a particular moment, the scope of responsibilities be presented, together with the lists of tasks, which will be fulfilled by particular sub-teams. The main coordinator of the event has to be able to supervise each of the parties. The objective of the discussed activity is to ensure that individuals responsible for certain tasks be aware of their role, and also their responsibilities.

In turn, the opportunity of Rzeszow Juwenalia is the fact that it is one of the greatest such student events in the region at the time when it takes place. The young population of Rzeszow exerts a very strong influence upon the success of the events. The developing infrastructure of this city and, as well as the numerous investments of Rzeszow University of Technology, make the venue of the event become more and more attractive every year.

5. Conclusion

The principal objective of this paper was to indicate the strengths and weaknesses of Rzeszow Juwenalia, and also to make an attempt to verify the opportunities and the threats which are involved in this event. Upon the basis of the conducted observations, and also the analysis of the literature, it is possible to ascertain that SWOT analysis makes it possible to accomplish the above-mentioned objectives.

The research conducted in the course of working on this paper made it possible to formulate the following conclusions:

- into the strengths of Rzeszow Juwenalia, the following may be included: a well-integrated team, the assistance of the authorities of the Higher Education Establishment, the venue of the events, and also the collaboration and the involvement of volunteers;
- opportunities of the undertaking include, among others, the assistance of external companies, a small number of the events of this league in the region, the young population of the city, and also the developing infrastructure of the campus of Rzeszow University of Technology;

- weaknesses of the project were presented as follows: limited experience, frequent changes of organizers, splitting competences among the Rectors, and also the absence of fences around the venue;
- within the threats of the event, the following were included: dependence upon the weather, the behaviour of the crowd, situation in the market, and also the possibility of terrorist attacks.

In recapitulation, it is possible to ascertain that the organization of mass events is connected with numerous aspects, out of which the most important ones are coordinating the processes of planning, performing and checking, and also perfecting. At every stage of the project, logistic organization fulfills the function of a peculiar integrator of all the described processes [18, 21] Planning appropriately early all the logistic and the organizational activities makes it possible not only to implement the planned work timely, and, as well as that, provide the possibility of the early detection of problems, and solving them. It is extremely important if the organizers are social individuals, frequently responsible for certain fields of academic activity. A significant element of the project is developing the optimum structure of the organization, and also appropriate matching tasks and individuals participating in the organization of the event. The greatest obstacle on the road to success is a very frequently changing organizational staff. In order to increase the quality of the event, it is indispensable, therefore, to store documents, and also to impart experience and information to fellow organizers.

References

- [1]. Act on Mass Event Security of 20th March, 2009 (*Journal of Laws* of 2015, item 2139).
- [2]. Drożdż M. (2015). *Ustawa o bezpieczeństwie imprez masowych. Komentarz*. C. H. Beck.
- [3]. Fill K. (2016). *Faza przygotowania i realizacji imprezy masowej na przykładzie organizacji Juwenaliów Rzeszowskich*. The paper delivered at the Conference: Security at Higher Education Establishments. Organization of Mass Events. Instytut PWN, Centrum Konferencyjne Zielna, Warszawa.
- [4]. General Police Headquarters in Poland <http://www.kpk.policja.gov.pl> (Accessed: 30.09.2017)
- [5]. Jung, J. H., & Yoo, J. J. (2017). Customer-to-customer interactions on customer citizenship behavior. *Service Business*, 11(1), 117-139.
- [6]. LoBuono, R., de Sevilha Gosling, M., Gonçalves, C. A., & Medeiros, S. A. (2016). Relationship between dimensions of experience, satisfaction, word-of-mouth and intention to returning: The perception of cultural event participants. *Podium Sport, Leisure and Tourism Review*, 5(2), 15-37.
- [7]. Mandhachitara, R., & Poolthong, Y. (2011). A model of customer loyalty and corporate social responsibility. *Journal of Services Marketing*, 25(2), 122-133.
- [8]. Oreski D. (2012). Strategy development by using SWOT – AHP, *TEM Journal*, 1(4), 283- 291
- [9]. Parszowski S., Kruczyński A. (2015). *Imprezy masowe. Organizacja, bezpieczeństwo, dobre praktyki*. Difin.
- [10]. Skendžić A., Devčić K.. (2017). The use of Social Networks for Educational Purposes - Case Study: Polytechnic Nikola Tesla in Gospic *TEM Journal*, 6(3), 607- 612.
- [11]. Szymonik A. (2012). Uwarunkowania logistyki imprez masowych, *Logistyka*, (3), 7-11
- [12]. Tiance D., Chenxi L., Xu, H. (2017) Social media and internet public events, *Telematics and Informatics*, 34(3), 726-739.
- [13]. Wolniak, R. (2013). The assessment of significance of benefits gained from the improvement of quality management systems in Polish organizations. *Quality & Quantity*, 41(1), 515-528.
- [14]. Woźniak J. (2017) Assessment of satisfaction and loyalty of mass event participants as exemplified by XXIII Rzeszow Juwenalia, In: Ujwary-Gil A., Nalepka A. (eds.), *Business and non-profit organizations facing increased competition and growing customers' Demands: Foundation "Cognitione"*, Nowy Targ and WSB-NLU, 16, 471-482.
- [15]. Woźniak J. (2017) Preferred methods of acquiring information by mass event participants, In: *International Scientific Conference of Business Economics Management and Marketing 2017. Proceedings of International Scientific Conference of Business Economics Management and Marketing 2017*, 308-315.
- [16]. Yoshida, M., James, J. D., & Cronin, J. J. (2013). Sport event innovativeness: Conceptualization, measurement, and its impact on consumer behavior. *Sport Management Review*, 16(1), 68-84.
- [17]. Yürük, P., Akyol, A., & Şimşek, G. G. (2017). Analyzing the effects of social impacts of events on satisfaction and loyalty. *Tourism Management*, 60, 367-378.
- [18]. Zimon D. (2017) The impact of TQM philosophy for the improvement of logistics processes in the supply chain, *International Journal for Quality Research*, 11(1), 3-16.
- [19]. Zimon D. (2016). An Attitude of Subcarpathian's Residents to Sustainable Solutions for Urban Transport, *International Letters of Natural Sciences*, 50, 41-56.
- [20]. Zimon D. (2017). Quality Management Systems' impact on the functioning of distribution channels in the FMCG market, *Quality-Access To Success*, 18(156), 52-56.
- [21]. Zomer, L. B., Daamen, W., Meijer, S., & Hoogendoorn, S. P. (2015). Managing crowds: The possibilities and limitations of crowd information during urban mass events. In *Planning Support Systems and Smart Cities* (pp. 77-97). Springer, Cham.