

# PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

# RESEARCH PAPERS

of Wrocław University of Economics

Nr 345

## Performance Measurement and Management

edited by  
Bartłomiej Nita



Publishing House of Wrocław University of Economics  
Wrocław 2014

Copy-editing: Agnieszka Flasińska

Layout: Barbara Łopusiewicz

Proof-reading: Barbara Cibis

Typesetting: Małgorzata Czupryńska

Cover design: Beata Dębska

This publication is available at [www.ibuk.pl](http://www.ibuk.pl), [www.ebscohost.com](http://www.ebscohost.com),  
Lower Silesian Digital Library [www.dbc.wroc.pl](http://www.dbc.wroc.pl),  
and in The Central and Eastern European Online Library [www.ceeol.com](http://www.ceeol.com)  
as well as in the annotated bibliography of economic issues of BazEkon  
[http://kangur.uek.krakow.pl/bazy\\_ae/bazekon/nowy/index.php](http://kangur.uek.krakow.pl/bazy_ae/bazekon/nowy/index.php)

Information on submitting and reviewing papers is available on  
the Publishing House's website  
[www.wydawnictwo.ue.wroc.pl](http://www.wydawnictwo.ue.wroc.pl)

All rights reserved. No part of this book may be reproduced in any form  
or in any means without the prior written permission of the Publisher

© Copyright by Wrocław University of Economics  
Wrocław 2014

**ISSN 1899-3192**

**ISBN 978-83-7695-473-8**

The original version: printed

Printing: EXPOL, P. Rybiński, J. Dąbek, sp.j.  
ul. Brzeska 4, 87-800 Włocławek

## Contents

Preface.....	7
<b>Anna Balicka, Mariola Kotłowska:</b> Internal benchmarking of technological process in a heating company .....	9
<b>Justyna Dyduch:</b> Discount rate in the assessment of investment project effectiveness.....	23
<b>Tomasz Kondraszuk:</b> Conceptual framework of strategic and operational cost accounting in agriculture .....	39
<b>Dawid Lahutta, Paweł Wroński:</b> The influence of the Cost-to-Serve methodology on customer profitability .....	47
<b>Marek Masztalerz:</b> Global Management Accounting Principles – emperor’s new clothes? .....	57
<b>Marta Mazurowska:</b> The role of behavioural research in management accounting .....	66
<b>Bartłomiej Nita:</b> Integrated cost management in supply chain.....	74
<b>Marta Nowak:</b> Male and female controllers. Between controlling and gender studies..	85
<b>Patrick Siegfried:</b> Analysis of the service research studies in the German research field .....	94
<b>Wiesław Wasilewski:</b> Risk analysis in cultural institutions .....	105

## Streszczenia

<b>Anna Balicka, Mariola Kotłowska:</b> Benchmarking wewnętrzny procesu technologicznego w przedsiębiorstwie ciepłowniczym .....	22
<b>Justyna Dyduch:</b> Stopa dyskontowa w ocenie efektywności projektów inwestycyjnych.....	38
<b>Tomasz Kondraszuk:</b> Ramy koncepcyjne strategicznego i operacyjnego rachunku kosztów w rolnictwie .....	46
<b>Dawid Lahutta, Paweł Wroński:</b> Wpływ metody Cost-to-Serve na zyskowność klienta.....	56
<b>Marek Masztalerz:</b> Globalne zasady rachunkowości zarządczej – nowe szaty cesarza?.....	65
<b>Marta Mazurowska:</b> Rola nurtu behawioralnego w rachunkowości zarządczej.....	73
<b>Bartłomiej Nita:</b> Zintegrowane zarządzanie kosztami w łańcuchu dostaw .....	84
<b>Marta Nowak:</b> Mężczyźni i kobiety jako controllerzy. Pomiędzy controllingiem a <i>gender studies</i> .....	93
<b>Patrick Siegfried:</b> Analiza usług świadczeń w niemieckich badaniach gospodarczych .....	104
<b>Wiesław Wasilewski:</b> Analiza ryzyka w instytucjach kultury .....	115

## Wiesław Wasilewski

University of Zielona Góra

e-mail: w.wasilewski@wez.uz.zgora.pl

---

# RISK ANALYSIS IN CULTURAL INSTITUTIONS

---

**Summary:** Cultural institutions are now functioning in difficult conditions arising mainly from the strong competition on the market and a weak economy. Organizations are trying to make the most rational decisions. One of many possible tools, which are characterized by a high level of application, is risk analysis. The purpose of this paper is to present the risk analysis process on the example of organization X, as well as possibilities for its adoption by cultural institutions. The scope of issues presented in the article is as follows: at first the concept of cultural institution is presented with a strong emphasis on business environment of cultural institutions. Next, the risk management process is briefly shown and an example (case study) of using selected elements of this instrument in a cultural institution is discussed.

**Keywords:** risk, cultural institutions, controlling, checklist.

DOI: 10.15611/pn.2014.345.10

## 1. Introduction

The name “cultural institution” is restricted to institutions whose principles of operation are based on the provisions of the Act on Organization and Execution of Culture-related Activities of October 25th, 1991. What is more, such institutions must be established by a minister, a manager of a central organizational unit (cultural institutions controlled by the state) or by a local government (local government cultural institution). The body, which establishes a cultural institution, is expected to provide it with all necessary resources which become the property of the new legal entity (once it has been registered) [Głowacki et al. 2009, p. 32].

Cultural institutions are part of the public sector. They are operating in market economy. Increasing competition and declining sources of income results in the fact that their actions should be rational. Risk analysis becomes an essential part of institution operations.

## 2. Cultural institutions as elements of the public finance sector

Cultural institutions can be defined as state or local government legal entities whose primary statutory purpose consists in conducting cultural activity (and not economic activity). The above mentioned type of institution includes mainly philharmonic orchestras, orchestras, operas, theaters, museums, art galleries, cinemas, cultural centers and other cultural institutions such as libraries or institutions specializing in the preservation and documentation of monuments [Wróblewski 2012, p. 26].

Cultural institutions operate on the basis of the articles of association and a statute provided by the founder. The internal organization of such institutions is governed by organizational regulations issued by managers of such institutions. The regulations become effective after the approval of the founder, trade unions and artist associations associated with the above mentioned institutions.

According to the provisions of Article 4 paragraph 1 point 8 of the Act on Public Finances of June 30<sup>th</sup>, 2005 [Ustawa z 30 czerwca 2005], cultural institutions owned by the state or by the local government are treated as elements of the public finance sector. Cultural institutions are obliged to cover operational costs and any other obligations from their current income. The sources of income include their current activity, the sale of movable tangible property excluding monuments, rent, lease, state and local government subsidies, as well as any other subsidies provided by persons, legal entities or any other sources.

The following groups of cultural institutions can be identified [Wróblewski 2012, p. 27]:

- 1) public cultural institutions, which can be further subdivided into:
  - a) state cultural institutions specified in the law,
  - b) local government cultural institutions founded by the local government authorities;
- 2) private cultural institutions founded by other subjects;
- 3) institutions founded by both public and private subjects.

Cultural institutions are treated as elements of the non-profit sector. Non-commercial organizations can be divided into:

- private (non-governmental) organizations founded by local citizens, independent of state and local administration, implementing tasks delegated by the state or providing services and goods not provided by the public sector and commercial enterprises but for which there is a demand;
- public organizations (museums, theaters, national parks, healthcare, education, schools, etc.), founded by state authorities or local governments. Their activity is public in character, i.e. generally available. They are controlled by their founding bodies. Public cultural institutions are classified as elements of the public sector and are financed fully or partly from public funds.

Cultural institutions are not autonomous or independent financially. They must maintain appropriate relations with other entities in their environment. The recognition of factors affecting the environment and their partners is essential.

**The audience** constitutes the most important element of the environment of cultural institutions. The groups which are to be addressed are defined by the cultural mission. Market analysis and the analysis of the structure of the audience are relevant procedures necessary for the purpose of identifying prospective addressees and developing methods of influencing them. A company which is determined to succeed in accomplishing mission must be fully aware of the characteristics of the market, as well as of the needs of its customers. Non-profit organizations, just like profit-oriented organizations, create a specific offer presented to their customers. Such offer is constantly optimized and adjusted to the needs of the clients [Matt 2006, p. 157].

**Patrons and financing institutions** constitute further target groups. The budget of private institutions is an important factor affecting profit generation, yet it should not replace public patronage. On the one hand, it is often observed that culture constitutes a crucial element of educational processes, especially in the public sphere, whereas on the other, it is suggested that additional financing of cultural organizations may improve significantly their profitability and economic result. Appropriate range of the offer of cultural activities may improve the attractiveness of particular regions or a cities [Matt 2006, p. 31].

The following are considered to be the main sources of financing of cultural institutions:

- donations and subsidies granted by state authorities and local governments,
- patronage,
- support of financing institutions,
- fundraising,
- sponsoring,
- income from the business activity run by the institution itself (profits from the sale of tickets, renting space, etc.),
- external and foreign sources of funding, in particular EU subsidies.

Relations with all the target groups are based on competitiveness and synergy. Cultural institutions are becoming increasingly more competitive within particular fields of cultural services and tend to increase the level of their competitiveness in the areas of culture and leisure activities.

Particular cultural institutions may exchange their services and offers but such relations should not be governed only by the principle of competitiveness. Any event organized by a particular organization is always unique both in terms of culture and economics. Even if two museums organize exhibitions of paintings of the same artists, customers can be encouraged to visit the second exhibition having had positive impressions after visiting the first one. Appropriate planning and synchronization of exhibitions, joint reduction of ticket prices, organization of complementary exhibitions, addressing similar target groups or other actions alike, may effectively result in the positive effect of synergy [Matt 2006, p. 32].

### 3. Risk management process

Risk management was developed in the 60s of the last century as a component of enterprise management in the U.S.A., from where, being proven with success in practice, theoretical concept of risk management originated and has been developed for the last 50 years.

There are many perspectives and views on the risk management process (see [Wasilewski 2010, pp. 25, 26]). In the documents and standards risk management is defined as “coordinated activities to direct and control an organization with regard to risk. Risk management generally includes risk assessment, risk treatment, risk acceptance, risk communication, risk monitoring and risk review” [ISO/IEC 27000:2009, p. 5]. Such an approach can be found in other official documents: Risk management is understood as “all the processes involved in identifying, assessing and judging risks, assigning ownership, taking actions to mitigate or anticipate them, and monitoring and reviewing progress” [*Pomarańczowa księga...* 2004, p. 49].

According to this definition, the risk management process consists of many interconnected steps. For further deliberations, it is reasonable to divide the phases of the process into two groups (see [Filipiuk 2007, p. 42]).

The first group includes risk identification, risk assessment (together forming the **risk analysis**) and risk control. These phases are the substance of risk management in the strict sense.

The other group includes tasks that accompany risk management in the strict sense and are thus of the character which includes all the phases. Such tasks are: formulation of objectives through planning and control, supply of information, reporting or risk communication, documentation, supervision and administration. All these tasks can be grouped together under the concept of risk controlling (see Figure 1).

Aims and tasks of risk management in the strict sense will be described in some more detail, since they are important for understanding further deliberations.

A monitoring structure is needed to make sure that risk management in an organization works properly. Methods of monitoring will depend on risk treatment measures. If avoiding and minimizing risk was chosen, in other words, reducing the likelihood of non-achievement of the objective (and the damage caused by that) to a given level, the criterion of assessment would be to achieve the assumed level of probability (and damage). If the organization has decided to transfer risk, the actual effectiveness of this transfer should be assessed. If the organization chose the way of acceptance of risk, then monitoring should demonstrate whether the level of the proposed measures, and the way of their implementation (use) were correct.

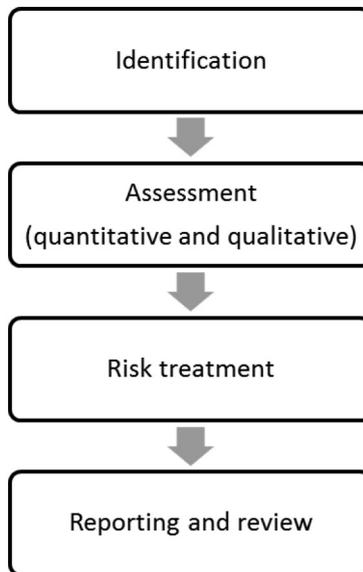
Implementation of risk management in the organization has primarily two objectives:

- risk awareness among employees of the organization is increased,
- the appropriate methods are used to handle the specific risk.



**Figure 1.** Risk management in the strict and in the wider sense

Source: own study.



**Figure 2.** The stages of risk management.

Source: own study.

Risk management deals with the pure and speculative risk. At the pure risk only pure loss is possible (material damages, financial losses, threats to life, ...). At the speculative risk besides the possibility of losses there is also a possibility of profit (see also [Kaczmarek 2008, p. 53; Tarczyński, Mojsiewicz 2001, p. 19]).

Risk management has the following main tasks (see [Jedynak et al. 2001, p. 33]):

- identification of the risk,
- assessment the risks,
- development and implementation of measures of risk treatment,
- controlling the effects of risk treatment measures.

These tasks are at the same time the most important stages of risk management process (see Figure 2).

## **4. Risk analysis in cultural institutions – case study**

### **4.1. Risk identification**

Cultural institution X is organizing the cultural event. The sponsor is ready to finance the project, but requires submission of a risk analysis of the project. The analysis will be based on the identification and assessment of risks.

The analysis of institution operations shows that in many entities, formalized, systematic, and ordered identification of risk is not conducted. In many cases this process does take place, and is realized intuitively, on a bigger or smaller scale. Its effectiveness is highly dependent on the experience of employees and their knowledge concerning the principles of the organization's operation.

The process of risk identification is most effective if it is formalized. Members of all levels of the organization should be obliged to record risk identification systematically.

Identification of risk is the process of searching for possibilities, and events that can lead to failure to achieve a set task.

Informal identification of risk in the institution is realized mainly by the analysis of documentation. The condition of its effectiveness and performance is the proper quality of data and experience, as well as the required skills of the person preparing the analysis.

Checklist is a popular instrument for the risk identification. Checklist allows employees a quick check and make sure whether the action has been completed. This instrument is advisable also for events that may seem routine actions.

Example checklist, developed for a medium-sized events, is presented in Table 1.

The checklist presented in Table 2 is designed to help to achieve the event goals.

Accurate, insightful, and moreover systematic application of the checklist allows for responding to the risk which is inherent in every artistic event. Checklist becomes part of the risk identification stage, which is a key feature for the risk management.

**Table 1.** Event logistics checklist no. 1

Aspects of the planning and control	Who is responsible	Deadline	Completed
Organization			
the objectives of the event			
milestones of the project			
estimated audience attendance size			
Budget			
expected rate of return			
the amount of expenditure			
Equipment and transport			
rehearsals time			
bed and board			
transport of people and equipment			
availability of service staff			
load-in and load-out time			
lighting requirements			
distribution of promotional materials			

Source: own study.

**Table 2.** Event logistics checklist no. 2

Question	Answer	Comments
What time do you need to access the theater to load-in?		<i>Access is limited to the contracted time.</i>
Will you need any street parking coned off for load-in deliveries?		
What time are the performers scheduled to arrive to the theater?		<i>Access is limited to the contracted time.</i>
How many total bodies, including performers and crew, will there be backstage for the show?		<i>Volunteers and crew wear a nametag or badge that identifies their permitted access area, such as backstage.</i>
What is the performance start time?		<i>Suggested time: 7:30 pm.</i>
What is the length of the first act?		
What is the intermission length, if any?		<i>Suggested time: 15-minute intermission length.</i>
What is the length of the second act?		
What time will you complete load-out of the theater?		<i>Load-out requires being clear of theater and backstage within suggested time.</i>

Source: own study on basis [<http://rialto.gsu.edu/rental/>].

## 4.2. Risk assessment

The next step is risk assessment. The process of the evaluation should be formalized and employees on every level of the organization's hierarchy should be obliged to perform it. One of the most useful methods to evaluate formalized risk is the risk matrix.

“In the case of the risk matrix, just as in other measurements of risk, both dimensions are taken into consideration: the amount of possible losses and the probability of loss occurrence” [Zellmer, Wasilewski 2010, p. 403]. No numerical value will be specified for each of the variables, but in both cases, an ordinal scale of evaluation will be identified, including small, medium, and high levels. For each identified risk, one should perform such evaluation and chose a proper value for the amount of losses and probability of loss. The general form of the matrix is presented in Figure 3.

Amount of losses

High	6	8	9
Medium	3	5	7
Low	1	2	4
	Low	Medium	High

Probability of loss

**Figure 3.** The general form of the risk matrix

Source: [Zellmer, Wasilewski 2010, p. 404].

On the basis of nine fields of the matrix, one can evaluate the level of the risk, providing that the scale of values presented below is used:

- very low risk (field 1),
- low risk (fields 2 and 3),
- medium risk (fields 4, 5 and 6),
- high risk (fields 7 and 8),
- very high risk (field 9).

An example of formalized risk evaluation is presented in Table 3.

**Table 3.** Formalized risk evaluation

No.	Risk	Probability	Amount
1	More than 20% of tickets are not being sold	small	high
2	Backstage deliveries besides the initial load-in (equipment, set pieces, etc.) are not on time	high	medium
3	Breakdown of the computer audio system	medium	medium

Source: own study.

An ordinal scale of evaluation was identified, including small, medium, and high levels. Evaluation was performed for each identified risk and a proper value for the amount of losses and probability of loss was chosen.

The results are presented in table 4.

**Table 4.** Risk matrix

Amount of losses				
High	<b>1</b>			
Medium		<b>3</b>	<b>2</b>	
Low				
	Low	Medium	High	Probability of loss

Source: own study.

On this basis, we can assume that:  
 event 1 – medium risk,  
 event 2 – high risk,  
 event 3 – medium risk.

The result of the analysis should make it possible to specify certain priorities in coping with the risk. We can evaluate which risk should be taken care of first, because it may influence the possibility of further operation of the organization. We may also evaluate risks which it is not necessary to take care of, because they are not considered a threat to the organization, and would be connected with unnecessary expenditure.

While analyzing this particular event risks, it should be noted that the risk connected with event number 2 should be the subject of an immediate reaction by the organization. Events number 1 and 3 should be taken care of subsequently.

## 5. Conclusion

Every organization must face risk during its operation. Quick identification and effective evaluation of its level makes it possible to maintain fluidity of activities

on the market at a constant level. In the majority of cases, such processes are not formalized and they take place intuitively. Implementation of a formalized process of risk analysis is beneficial for institutions, especially in the field of decision making.

The problem is that the management has a low awareness of internal and external factors affecting the organization. There is a huge lack of knowledge about the basic tools and instruments for risk analysis. Outsourcing could be one solution. External risk manager occurs in the organization as an expert advisor with great experience. In this way the risk analysis begins to bring the organization benefits much faster.

## References

- Filipiuk B., 2007, *Transparenz der Risikoberichterstattung. Anforderungen und Umsetzung in der Unternehmenspraxis*, Gabler-Verlag, Wiesbaden.
- Głowacki J. et al., 2009, *Finansowanie kultury i zarządzanie instytucjami kultury*, Wydawnictwo Uniwersytetu Ekonomicznego, Kraków.
- <http://rialto.gsu.edu/rental/>.
- ISO/IEC 27000:2009, *Information technology – Security techniques – Information security management systems – Overview and vocabulary*.
- Jedynak P., Teczek J., Wyciślak S., 2001, *Zarządzanie ryzykiem w przedsiębiorstwach zorientowanych międzynarodowo*, Księgarnia Akademicka, Kraków.
- Kaczmarek T.T., 2008, *Ryzyko i zarządzanie ryzykiem: ujęcie interdyscyplinarne*, Difin, Warszawa.
- Matt G., 2006, *Muzeum jako przedsiębiorstwo. Łatwo i przystępnie o zarządzaniu instytucją kultury*, Fundacja Aletheia, Warszawa.
- Pomarańczowa księga. Zarządzania ryzykiem – zasady i koncepcje*, 2004, Ministerstwo Skarbu JKM, London.
- Tarczyński W., Mojsiewicz M., 2001, *Zarządzanie ryzykiem: podstawowe zagadnienia*, PWE, Warszawa.
- Wasilewski W., 2010, *Zarządzanie ryzykiem w zarządzaniu kryzysowym*, [in:] A. Antonowicz (Ed.), *Współczesne dylematy funkcjonowania i rozwoju przedsiębiorstw – teoria i praktyka*, Wydawnictwo Uniwersytetu Gdańskiego, Sopot.
- Wróblewski L., 2012, *Strategie marketingowe w instytucjach kultury*, PWE, Warszawa.
- Zellmer G., Wasilewski W., 2010, *Ocena ryzyka przedsiębiorstwa – podstawy teoretyczne i praktyczne metody*, [in:] J. Stankiewicz (Ed.), *Problemy zarządzania strategicznego wobec przemian w otoczeniu współczesnych przedsiębiorstw*, Uniwersytet Zielonogórski, Zielona Góra.
- Ustawa z 30 czerwca 2005 r. o finansach publicznych, Dz.U. 2005 nr 249, poz. 2104.

## ANALIZA RYZYKA W INSTYTUCJACH KULTURY

**Streszczenie:** Instytucje kultury funkcjonują w trudnych warunkach dużej konkurencji na rynku, przy jednoczesnym spowolnieniu gospodarczym. W takich warunkach kluczowym aspektem staje się racjonalne podejmowanie decyzji. Jednym z wielu możliwych do zastosowania narzędzi, charakteryzującym się dużym stopniem możliwości zastosowania, jest analiza ryzyka. Celem tego artykułu jest zaprezentowanie procesu analizy ryzyka na przykładzie organizacji X, a także przedstawienie możliwości jego zaadaptowania do potrzeb instytucji kultury. Na początku artykułu omawiane jest pojęcie instytucji kultury ze szczególnym naciskiem na jej otoczenie biznesowe. Następnie przybliżony zostaje proces zarządzania ryzykiem oraz poddany dyskusji przykład (studium przypadku) wykorzystania wybranych elementów tego instrumentu w instytucji kultury.

**Słowa kluczowe:** ryzyko, instytucje kultury, controlling, lista kontrolna.