

## MANAGEMENT OF RISK FACTORS IN PUBLIC INSTITUTIONS

TUTA, A[neta] A[ni]

**Abstract:** *The paper aims to highlight the important role of risk management, because if the exposure of an entity is not only affected its leader, but also employees and their families, customers, beneficiaries of products or services, and even people in the area. The purpose of this work is to highlight the stages of risk management, to present the main categories of risk factors from the level of local public institutions but also to identify measures that will determinate the decrease of their vulnerability at corruption facts at the level of these institutions.*

**Key words:** *risk, management, human error, control, risk factor*

### 1. INTRODUCTION

Risk management is a complex process of scientific approach to risks that uses material resources, financial and human for goal setting which concerns the reduce of exposure to losses. In the risk management, process should achieve two broad objectives, namely: pre-and post-event goals. Risk management includes these four phases: identification and risk assessment, risk analysis, risk management, risk financing. It is important to note that if an entity's risk exposure is not affected but its leader, but also employees and their families, customers, beneficiaries of products or services, and even people in the area. From this perspective, the objective of "social responsibility" category must belong to both pre goals and objectives of post-event category. Until not long ago, I was tempted to believe that organizations are subject solely to acts rationally organized, precise, meticulous. In fact, we convince more and more that exist within them a large dose of irrational behavior resulting from any action that (human, economic, etc.) is contained in a complex and very diverse influences and determinations difficult to detected (Allaire et al., 1998).

### 2. IDENTIFICATION AND RISK MANAGEMENT IN LOCAL PUBLIC INSTITUTIONS

#### 2.1. Identification and risk assessment

Risk identification is the first and most important stage of risk management process, it consists in identifying potential hazards that exist within the entity. In this stage, is realized a modeling of technical system, organizational and managerial of investigated entity in order to determine and highlight its key issues, seen as a system and an indication of the influence of exogenous risk factors (Prunea, 2003). Hazard identification activity has the purpose to detect if possible all existing risk factors. For systematic risk identification activity can be used several methods of work, such as questionnaires or lists of questions, catalogs or lists of hazards, methods of quantitative and qualitative analysis to identify hazards. The most used techniques to identify risks are: interview of the strategic and operational responsables, survey and questionnaire, brainstorming on your activities or departments, organizing focus groups, comparison groups, checks, etc. (Gheorghe, 2003).

#### 2.2. Risk factors of public institutions

Risk factors associated to the entities from rural public institutions can be classified as:

- Internal risk-factors;
- External risk-factors.

In turn, external risk factors can be divided into: risk factors determined by environmental (objective); risk factors such by human nature (subjective) (Ghita et al., 2004).

It is important to specify that risk factors are not independent, and losses of event risk situations are often consequences of interdependence between them.

This category of risk factors from the local public institutions may include:

- a) In the field of access to information: failure by the authorities of specialized departments;
- b) Advertising of information: incognizance / poor knowledge of the types of information that can offered, the local council results
- c) Promoting administrative transparency: poor / lack of training of staff in the Public Relations department, poor communication with users of offered public services.
- d) Financial management: lack of transparency in the public procurement system.

#### 2.3 Human error

Although the concept of human error has a pronounced subjective character, it can be defined as a dangerous action that exceed a certain threshold of acceptability.

Whatever form of participation in activities and socio-economic processes, human factor makes, either directly or indirectly, the levels of potential risks associated entity to which it belongs.

Existing statistics show that human error is at the origin of 20-90% of all major accidents of the systems.

Number of errors produced is determined by the reliability of the human factor, subject which remains widely discussed topic by specialists and still impossible to predict with sufficient accuracy. Research conducted in this area underline the reality that human mistakes rate increased significantly, proportionally to increasing technical complexity of the system to which it belongs, and of the complexity of the task, which he has to achieve. A characteristic element of the human factor is

System	Percentage of total errors [%]
Aviation	60-70
Air traffic control	90
Buildings and bridges	75
Dams	75
Rockets	20-53
Power	20-80
Shipping	80

Tab. 1. Share mistakes caused by human error

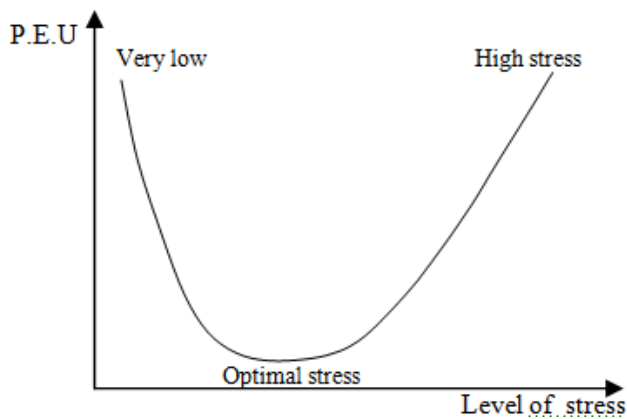


Fig.1. Likelihood of human error in the level of stress (Serbu, 2002)

that the error committed can be repaired, feature that called recover of the error, being very important to estimate because it enters for the calculation of the human risk.

Research has revealed an apparently paradoxical reality that the presence of very small, or too much stress, favors increasing the number of human errors. A certain level of stress called optimum stress, which varies from person to person can be defined within some limits, it causes the decrease in human errors and human reliability growth, as in figure 1.

In conclusion, the steps to be followed in analyzing the risk posed by human factors are:

- Identifying technical system and the work completed;
- Define the task to achieve;
- Identify possible ways of error;
- Identify the consequences;
- Identifying opportunities for error recovery;
- The causes of error;
- Identify strategies to reduce errors;
- Technical measures to reduce risk;
- Estimate the probability of error (P.E.U.);
- Estimating the likelihood of recovery (R.E.U.);
- Assessment of the losses (C);

The risk assessment produced by the human factor can be calculated with the formula:

$$R = P.E.U. * (1 - R.E.U.) * C \quad (1)$$

### 3. INTERNAL CONTROL AND RISK MANAGEMENT

Techniques used in risk control can be divided into two broad categories:

- Control techniques (designed to minimize the costs of those risks, to which the business is exposed)

Financing techniques (targeted to identify funds to meet losses). They are chosen based on levels of acceptability or unacceptability of risks. In any entity, risk management process involves the following steps: identifying the activities and operations, identify associated risks, establish of risk factors or criteria, risk assessment, risk hierarchy and setting priorities; establishment of an owner, or person responsible for risk management, defining an action plan and monitoring its application, systematic reporting of the implementation of internal control measures adopted and applied for effective risk management and legal (Sandru & Sandru, 2009).

Mentioned steps cannot be realized in the absence of the existence of a risk management policy.

### 4. CONCLUSIONS

Basing on the increasing complexity of tasks and structures, missions of public institutions and widening the regulatory domain (laws), are necessary the following conclusions:

- Promote widely of the managerial principle, delegation of authority and of finding new forms, methods, procedures and rules whose observance is to protect the appearance and manifestation of serious risks
- Must be corrective measures for risk factors, such as; the establishment of specialized departments in public relations, publication of lists containing informationS that can be automatically, on demand as well as those to which access is restricted, promoting conditions formal to be met by applicants to obtain information upon request in writing, orally, promoting it available to the applicant in case of refusal by a public institution;
- Internal control tends to settle, becoming more in the center responsibilities, concerns and activities of managers.
- The foundation on which is based the entire process of optimization, management operations into one entity, whatever it is, is represented by the internal control
- Lack of internal controls or formal organization / its poor results in most cases leads to the conditions conducive to the manifestation of fraud, taking advantage of weaknesses system.

These findings lead to these measures in the organization: establishing internal risk policy and structures for business units and designing and reviewing processes for risk management

### 5. FUTURE WORK

In my next work I'll try not to make a future case study regarding the level of risk due to human error in a local public institution. Identifying risk factors and application management of risk factors will substantially reduce them.

### 6. REFERENCES

- Allaire, I., Fârșitoru, M., (1998), *Strategic Management*, Economic Publishing House, Bucharest..
- Financial decision risk in small and medium factory*, Genicod Publishing Ltd., Bucharest..
- Ghita, M., (2004), *Internal Audit*, Economic Publishing House, Bucharest.
- Prunea, P., (2003), *The risk business. Facets. Factors. Ways of reducing*, Economic Publishing House, Bucharest, 2003.
- Serbu, T., (2002) *Risk Management. Elements of theory and calculation*, the Police Academy, "Al. I. Cuza ", Bucharest.
- \*\*\* Official Gazette OMFP no. 946/2005 for approving the Code of internal control, including standards of management / internal control at public entities and to develop management control systems, Gazette. No. 675/2005.
- Sandru, O.I., Sandru, I.M.D., (2009), *Regarding Education Quality Management Problems as Dynamic System Theory Problems*, Annals of DAAAM for 2009& Proceedings of the 20 th International DAAAM Symposium, ISSN 1726-9679, Vienna 25-28 th November 2009, pages1557-1558