

## RISK MANAGEMENT in modern companies

Daniel MANAȚE

Aurel Vlaicu University Arad, Faculty of Economics, ROMÂNIA, Arad,  
E-mail: eonmad1@yahoo.com

**Key words:** risk management, risk matrix, risk event, risk source, risk impact

**Abstract:** *The paper presents the general frame and the utility of a risk management system for modern companies. The components of such a system, like risk matrix, risk event, risk source, risk impact are discussed. Finally, examples of risk events and their impact on the company are brought to the reader's attention.*

### 1. INTRODUCTION

Successfully modern companies were intensely preoccupied during last years to administrate risks that affect their activities and their economic and financial performance. Most of those even implemented a risk management system. It deserves the main goals of firms, among we mention sustainability of profits, viability of business, protecting shareholders long term interest. In this respect, adopting the best practices in risk management became mandatory for every competitive organisation.

The risk management system implies, to function, a specialized entity (internal/external, individual/compartment), appropriate practices, procedures and tools in the context where the business is evolving.

### 2. THE ROLE OF RISK MANAGEMENT IN MODERN COMPANIES

Business communities are more and more sensible at the fact that the volatility of sales and profits can affect negatively the shareholders value. Globalization materialise even by bringing to different world companies risks that were specific only to certain economic sectors or geographical areas, factor that accentuated the quest for efficient tools and techniques to manage risks.

In simple terms, risk management means identifying, measuring and administrating risks. It's a process through which companies increase the capacity to communicate risks and take pro-active decisions concerning their own risk profile.

Among the most important objectives targeted in risk management, we mention preserving profit margins and administrating the variance of profits. The purpose of such targets is a better measure of risk at the company level and to quantify the way risk evolves and affects profits. Measuring the market risk can be used in establishing the contribution of this risk in not meeting the profit targets of the company.

Another important purpose is to minimise the possibility of cash shortage induced by the market, aiming to protect against market risks that can affect the cash flow. By promoting a greater transparency of company's risks, the organization will better communicate, both internally, with employees, and externally, with the investors, creditors, media or authorities. A well designed frame for measuring risks offers important information that can be used by the management in establishing the risk profile of the company, improving the corporate governance process.

### 3. RISK MANAGEMENT. DEFINITION AND TYPOLOGY

Risk management is a process of methodical approach to the risks associated to different organizations activities in the purpose to fulfil their objectives and the profits from each conduct, but also the targets and the profits brought by an entire portfolio of activities.

Risk management is a continuous process, a component of organizational strategy and must methodically approach all risk types, connected with past, present and future activities and be integrated in organizational culture.

There are three main objectives of risk management: increasing the firm's success chances, diminishing the chances for failure and reducing the uncertainty regarding the objectives. The central objective of risk management is to maximise the value generated by organizational activities, and, in this purpose, the potential for profit and loss that can affect the organization must be understood.

Risk management is focused on the next three directions:

- risk identification,
- risk measurement,
- risk treatment.

The main risk types are: operational risk, market risk, strategic risk and reputational risk.

**Operational risk** [1] is *“the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events”*, with the observation that operational risk does not comprise strategic or reputational risk.

Also, in Basel Committee on banking Supervision it is mentioned that *„operational risk it's not about measuring or capital requirements but about the management of people, processes and technology”* and represents the risk of loss or failure to obtain targeted profits, being determined by internal factors (inadequate internal activities, unprepared staff or inadequate systems) or by external factors (economical conditions, changes in the business environment, technological progress). Operational risk is composed, usually, by the following risk types: process risk, personnel risk, technological risk, legal risk, external risk.

Operational risk is optimally managed if there are adequate procedures for doing, reporting, monitoring and control, well established for every activity class within the organisation.

Risk reporting documents are two types: event reports and risk reports. The event risk reports are realised at different organizational levels, attribute specified in the job descriptions, while the risk reports are realised in a specialised risk management entity.

**Market risk** is the risk that the value of a position from the balance sheet or the profit and loss account be affected by the changes at the capital markets, changes of the interest rates or the commodities prices. The main components of market risk are:

- interest rate risk, affects especially companies with a large amount of loans;
- exchange rate risk, affects the most the companies involved in import-export operations or firms with loans in foreign currencies;
- risk of commodities and utilities markets, through liquidity and price volatility;
- risk of organised capital markets, for listed companies or firms that hold investments in listed companies.

**Strategic risk** is the risk associated with the business strategy and business plan and includes, without limiting, the plans to penetrate new markets, develop new services and products, mergers & acquisitions, developing the organization and so on. This type of risk involves a robust planning process, including logistics and information technology.

**Reputational risk** is the risk of negative media reflexion for the organization linked to its name / image or business practices as a “*good citizen*” and, that can lead to losses, conflicts or trials. The reputation of a firm may be significantly compromise if there is induced in the market the perception that the firm is not conducting its businesses with full responsibility and safety.

### 3.1 Risk matrix

Successfully organizations use a strong and efficient tool, the main risk matrix [2] that can affect their activity. Designing the risk matrix is based on identifying the risk events and the risk sources associated with companies activities. This operation facilitates the treatment, the transfer and / or assuming risk, the essence of risk management.

Once they identified the main risk events and sources of risk, the specialists are estimating the frequencies of those events to manifest and on the impact on the organizational size, especially the monetary impact. From the estimates on the frequencies and impact results the risk hierarchy through positioning within risk matrix (Fig.1).

C O N S E Q U E N C E	Severe	RM**	RI**	RI***
	Medium	RA**	RM*	RI*
	Minor	RA	RA*	RM
		Low	Medium	High
		FREQUENCY		

**Fig.1 Risk Matrix**

The significances are:

- ⇒ RA = acceptable risk that does not need monitoring, managerial efforts and additional costs,
- ⇒ RI\*\*\* = unacceptable risk that needs monitoring, managerial efforts and additional costs, like insurance cost (ex. vehicles, merchandises, buildings, hedging for operations in foreign currency, and so on),
- ⇒ RM\*\* - RM = acceptable risks for medium additional costs and reasonable managerial effort.

Monetary quantifying of risks allows the classification of risks based on the risk tolerance level, defined upon an amount of money, view as a limit. This facilitates managerial judgements regarding the approach of different risk types compared with the associated cost for treatment / transfer / or taking the risk and the potential impact or consequence upon the organization.

A risk with low frequency and minor impact is an acceptable one (RA). In this respect, it does not induce financial/human resources spending to be treated.

A high frequency risk and severe impact is an unacceptable one (RI\*\*\*) and, if possible, this risk is avoided (ex. avoiding a contract that can induce a RI\*\*\* risk type).

If there is not the possibility to avoid a risk, it is intensely monitored and managed and may generate some additional costs, ex. hedging for operations in foreign currency.

Using the risk matrix needs the involvement of the personnel from all firms compartments in designing the matrix itself, which ends in positive outcomes, such as:

- ⇒ Facilitates for the personnel the acknowledgement of the risks associated with firms activities, either specific of a business or for the whole organization,
- ⇒ Facilitates the risk management process, the well knowing of the risk events and risk sources, making easier the risk approach (treatment, transfer or taking).

**A risk event** [3] is every type of happening, action or activity, either voluntary, either stochastic, programmed or not, current or past, done by people, economic or social systems or caused by natural or socio-human phenomena and that can affect currently or in the future on the activity, the objectives and the image of the organization.

**The frequency of the event** [4] is the measure of the number of it's achievements in a certain period (ex. a year).

**A source of risk or hazard** [4] is the thing which has the intrinsic potential to harm or assist a harming action towards the organization. It means every aspect that increases the effects of a risk event and, also, everything with a potential to harm (ex. the competitors actions).

**A consequence** [4] is the outcome or impact on a range of stakeholders and assets.

The risk source, risk event, the consequence or impact, the risk cause, the control and the localization are among the six risk components [4]. All six, applied concurrently, can fully describe any risk type. We have to keep in mind that an event can have more than an impact; the consequences can be positive or negative, can be expressed quantitatively or qualitatively and are considered along with the achievement of the objectives.

Risk reports have a minimum content type: risk events, type of risk involved, the activity that was affected, the impact upon the organization, actions to take. Usually risk events are classified according to their impact in: major, medium and minor.

### 3.2 Examples

#### *Examples of risk events – operational risk*

Risk event – the delivery of complex products to company ALPHA, that involves the montage at the client headquarter and instructing the client's personnel.

Correspondent risk sources:

- ⇒ unsatisfactory training of the delivery staff,
- ⇒ missing of technical components needed in the montage process caused by the negligence of the responsible with the collets packaging and the lack of control, and so on.

The negative impact can be financially, due to either the renounce of the client to other firm's products or compensations asked for failure in respecting the contract, and so on.

Risk event – travel of some staff with firm's car, with the firm's driver.

Correspondent risk sources:

- ⇒ the driver is tired,
- ⇒ the driver has consumed alcoholic drinks,
- ⇒ there are severe malfunctions of the car, unknown till the travel, and so on.

The negative impact can be social, caused by the accidents of some staff, financially, by damaging the vehicle and/or payments of medical treatments and compensations for the people injured, or even human resources competencies caused by the loss of competent staff, and so on.

Risk event – informatics viruses attack upon the firm's servers.

*Correspondent risk sources:* the inadequate protection of servers.

The negative impact may be financial, caused by the losses resulted in servers malfunction, or caused by the costs induced by the costs for repairs or by delays in operations or payments due to servers malfunction.

*Examples of risk events derived from market risk*

Risk event – strengthening the LEU against EURO.

*Correspondent risk sources:* delivery of products paid in EURO.

The negative impact can be financial, caused by a smaller amount of LEI than the correspondent amount at the date that the products were realised.

Risk event – the increase of the average interest rate at firm's loans.

*Correspondent risk sources:* the existence of loans with variable interest.

The negative impact can be financial, due to the higher financing costs.

Risk event – the decrease of the average market interest rate.

*Correspondent risk sources:* the existence of loans with fixed interest rate.

The negative impact can be financial, due to the missing of the positive effect of decreasing the financing cost in case of a loan with variable interest rate.

*Example of risk event derived from strategic risk*

Risk event – all types of firm's activities.

*Correspondent risk sources:*

- ⇒ inadequate allocation of human resources, without keeping in mind the abilities, the knowledge and the experience,
- ⇒ the lack of SMART objectives, able to enhance the involvement of the personnel and facilitate the staff valuation and motivation.

The negative impact can be of any nature: financial, organizational, reputational or human resources, and may endanger even the organizational targets.

*Example of risk event derived from reputational risk*

Risk event – organising a press conference.

*Correspondent risk sources:*

- ⇒ the conference is held in an inappropriate location,
- ⇒ the conference is not well prepared (press materials are missing, the staff at the press conference do not hold all specific information needed, and so on),
- ⇒ the staff is irritated or tired or inhibited, and so on.

The negative impact can be especially an image one.

#### 4. CONCLUSIONS

In the context of globalization and the intensifying competition every successful company needs to continuously adapt to the national or international realities of the industry. In this respect, the methods to manage risk have a significant impact for reaching firm's targets on medium and long term. Implementing and consolidating in a unique risk management system of all activities and processes must become a priority. For this purpose, creating an entity for risk management is needed, the writing of all procedures and practices for an efficient activity, identifying the methods to measure and manage specific sector risks, training of the personnel and an adequate empowerment of the competences and responsibilities in risk management.

## REFERENCES

- [1] Basel Committee (2002), *Revised Working Paper September 2002*, Basel
- [2] RISK METRICS GROUP (1999), *Corporate Metrics*, pp. 12-18, New York
- [3] Manate, D, Farcas, P., Pescar, P. (2006), *Proiect de sistem de management al riscurilor la SIF Banat – Crişana*, Arad
- [4] Joint Standards Australia / Standards New Zealand Committee (1999), *Risk Management AS/NZS 4360:2004*, Sydney, Wellington