IMPACT OF RISK IN THE ORGANIZATION: THE NEED FOR MEASURING AND MANAGING IT

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Abstract

After the 2008 events that occurred in world financial markets, all organizations have increased interest in risk management. It is very clear that risk management brings benefits to the organization. By taking a proactive approach to risk and risk management, organizations will be able to manage to improve performance and results in these three areas:

- Operations performance of the organization will become more efficient if the events that can cause obstructions in advance will be identified and managed. In this way, they can be prevented or minimized by the actions taken to reduce the possibility of anexpected events. These actions will help to reduce the damage and costs caused by these events, which can cause obstructions in the normal development and manufacturing operations.
- Processes developed in the organization will be more effective if taken into consideration prior selection of processes and risks involved in options that may be available. In this way the changes in processes related to projects that are already submitted will be more reliable and more efficient.
- Finally, the chosen strategy of the organization will be more effective if risks associate with various strategic options will be fully analyzed and will reach the best decisions possible. Efficiency refers to the fact that the chosen strategy to be implemented will be fully capable of delivering the required results.

As a consequence it is no longer acceptable for organizations to find themselves "catched" in a position where unexpected events cause financial loss, reputational damage and loss of presence in the markets. In this contxt iterested parties now expect from organizations to take full responsibility for the risks that may cause difficulties in the process of operations, delay in the realization of the project or failure to present alternative strategies.

Key terms: Risk, returns, organization, operations, processes, strategy, rsik quantification, risk management, risk insurance.
JEL Classification: M1, M2, G3,D8, D81

1. Introduction

In the modern economy risk management is an important factor of development and overall economic stability. In this sense when it comes to executing the business management and leadership, especially in the field of finance, marketing, accounting and production, in recent times should always be included and developed risk management function as a particular function at work. This is because risk management requires special knowledge and qualifications from individual who deal professionally with risk management [1].

In recent literature, risk management most often is defined as a determinated process of identification, measurement and economic control of risks, that threaten the assets, income, human life or business enterprise. Such a definition of risk management is acceptable and applicable when it comes to technical and financial aspects of risk in general, and especially when it comes to technical and financial aspects of risk in the insurance field.

By taking a proactive approach to risk, risk quantification, and risk management, organizations will be able to achieve improvement in these three areas:

- Operations performance in the organization will become more efficient;
- Processes developed in the organization will be more effective;
- The strategy of organization will be more efficient.

For this reason it is no longer acceptable for organizations to find themselves "catched" in a position where unexpected events cause financial loss, reputational damage and loss of presence in the markets. In this contxt iterested parties now expect from organizations to take full responsibility for the risks that may cause difficulties in the process of operations, delay in the realization of the project or failure to present alternative strategies.

In this paper we try to explain the impact of risk on the organization and the negative effects it produces to the operations performance, the development of processes and projects, and the selection and implementation of alternative development strategies. In this context we discuss possibilities of minimizing these negative effects through consistent implementation of risk management.

2. Risk, time and return

2.1. Defition of risk: Probability and uncertainty

Risk is the fear that something bad will happen, and our reaction to this evil in order to soften its negative impact. This has to do with our measures for risk prevention. The risk follows us almost everywhere in life. As I'm writing this note I face the risk of using time unrationally, and for that reason I should have an alternative plan how to achieve my objectives if for some or another reasons something gets wrong in my schedule. Or, in order to prevent that "evil" not to happen I would need to predict during the preparatory phase of my time if such a thing will happen, so I give myself extra 10% of time 10% in total. The same happens with the risk in organization during the preparatory phase of our investment, or even our lending, or receipt of deposits from others. In all these cases, we should be prepared at best, and have a proper answer to the question "What if?". This question should accompany us in every phase of our preparations and work, as well as in the worst scenarios. Then we will be able to know the best scenarios and the bad ones, so we are able to operate in almost every possible situation and various real contexts. We'll be able to know how far we could accept a certain risk, for example, amount of

[1]Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 9-11

loans in relation to our own funds, then the number of workers in relation to income,etc.

In the broadest sense, risk represents a certain hazardous event, uncertainty, loss, "gambling", a future uncertain event which may have undesirable consequences. Concept of risk should be distinguished from concept of uncertainty. We are talking about risk in cases where the different exclusive effects came in as a result of any future event which can be expected with the known (assumed) probability (p). If such probability does not exist, then that is uncertainty. The development of statistics and the theory of decision making have proved that this distinction is crucial to review key risks in insurance, Figure 1.

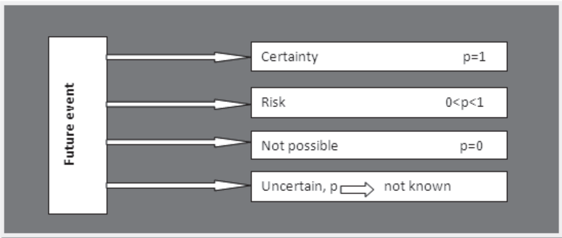

Figure 1. Risk, probability and uncertainty

This explains that the risk and uncertainty are not identically the same thing. Risk relates to the fact on how leaders who make decisions are able to estimate high probability of different levels of results they expect, which are the product of decisions taken by them. Uncertainty refers to situations where the head of the firm who makes different decisions is not able to count accurate on whether or not a particular phenomenon will happen in the future, or whether or not will occur returns of invested capital[2].

Risk is present in a permanent way in economic activity in general and in financial activity in particular, and it can be reduced or mitigated, but not entirely removed. For these reasons, in the theoretical treatments and daily dealings, great care was given to the determinants and consequences of the risks and ways of minimizing them.

If we start from this, that risk presents opportunity and determined level of certainty for the creation of some specific cases or actions with adverse consequences, in relation to people and funds, respectively in relation to wealth creation in terms of material damage, then the possibilities for the creation of damage can be relatively large and diverse. So the potential risks in terms of determinants, often are grouped into two major groups:

– *Non-economic risks, and*
– *Economic risks.*

Non-economic risks, respectively risks caused by non-economic determinants, are risks that are a result of storms and natural disasters, preparations for war or war development (transformation of the national economy in military economy), social tensions caused by different reasons, political tensions, etc. Risks caused by non-economic determinants, are largely of objective nature (that does not mean that there are excluded subjective reasons), there are difficulties to anticipate them, may last longer and can have serious consequences on the realization of the business policy of economic entities, especially in the realization of global economic policy.

Economic risks, respectively risks caused by economic determinants, in essence can be: technical, physical and financial. Technical risks arise from the technology of work and use of technology, from the opportunity of harmful actions as a result of the manner of conducting business operations. Physical risks are associated with the material content of means in the work process, respectively for actions that lead to the fall or the creation of materials due to the action of certain forces. Financial risks are defined as an opportunity to occur losses, as a result of the financial operation, under which they are carried out (bad business deals, wrong calculations and estimates, as financial measures at home and abroad). Risks cause permanent loss or damage to the organization's objectives and measuring the level of impact of such risks is of great importance.

Approaches to defining and determining risk are different. In the Oxford English Dictionary risk is defined as: “The opportunity for the occurrence of risk*, loss,* or damage, that adversely affects the organization's work and at the same time can be very dangerous”[3]. In this context, the concept of risk is used to signify the negative consequences[4]. However, the concept of risk is not always understood in the negativ context[5]. This is because the risk can often result in a positive outcome[6]. A third possibility is that risk has to do with the uncertainty of results[7]. Definitions of risk can be found from many sources and some of the key concepts are presented in the table below[8].

[2]Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 11-12

[3]The Oxford English Dictionary, Oxford University Press,2002

[4]ISO Guide 73 (2009) Risk management – Vocabulary – Guidelines for use in standards, www.iso.org

[5]Institute of Risk Managem ent A Risk Management Standard (2002), www.theirm.org.

[6]Financial Reporting Council Internal Control Revised Guidance for Directors on the Combined Code(2005), www.frc.org.uk.

[7]COSO Enterprise Risk Management – Integrated Framework (2004) Executive Summary, www.coso.org.

[8]British Standard BS 31100 (2008) Risk management – Code of practice, www.standardsuk.com.

Table 1. Defitions of risk

Organization	Definition of risk
ISO Guide 73 ISO 31000	Effect of uncertainty on objectives. Note that an effect may be positive, negative, or a deviation from the expected. Also, risk is often described by an event, a change in circumstances or a consequence.
Institute of Risk Management (IRM)	Risk is the combination of the probability of an event and its consequence. Consequences can range from positive to negative.
"Orange Book" from HM Treasury	Uncertainty of outcome, within a range of exposure, arising from a combination of the impact and the probability of potential events.
Institute of Internal Auditors	The uncertainty of an event occurring that could have an impact on the achievement of the objectives. Risk is measured in terms of consequences and likelihood.
Alternative Definition by the author	Event with the ability to impact (inhibit, enhance or cause doubt about) the mission, strategy, projects, routine operations, objectives, core processes, key dependencies and / or the delivery of stakeholder expectations.

Source: Hopkin, Paul.*Fundamentals of risk management: Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. p. 12

2.2. Sources of risk

There are many sources of risk. All these sources can be divided into two major groups: In the first group are included all sources of risk that affect simultaneously and equally on all subjects who exercise economic activity in a given economy. Such sources are:

- The upward or decline trend of the economy;
- Volatility of interest rates;
- The decline of purchasing power of the currency afflicted by the inflation;
- Volatility of exchange rates;
- Volatility of securities prices and their axchange ratings.

In the second group are included all sources of risk that affect only a single microeconomic subject or enterprise, on its activities and ways of its funding. These risk sources are:

- The risk of competition,
- The lack of profit,
- Excessive costs etc.

Regarding sources that cause risks, we distinguish two different types of risk:

- Systematic risk, and
- Unsystematic risk.

Systematic risk is the risk that stems from general factors with effects on all economic entities in a country. Systematic risk has effects on all economic units systematically without exception. Within the framework of an economy systematic risk is seen as the risk to which we can not defend, so that is the risk that can not be avoided.

Unsystematic risk is company or industry specific risk that is inherent in each investment. The amount of unsystematic risk can be reduced through appropriate diversification. Unsystematic risk is the risk caused by specific and distinct factors, that operate and give effect only on a firm. Unsystematic risk affects only an enterprise. These are effects that can be foreseen and to which can be taken preventive measures for risk reduction or even elimination. Unsystematic risk is the risk that can be diversified and at the same time it is the risk that can be reduced by this process.

2.3. Risk versus time

Risk can be examined not only from the standpoint of actual time, time to which refer calculations, but also from the perspective of the function of the flow of time. Risk is an increasing function with respect to time, which means that the longer periods of time we make predictions and calculations the more exposed to risk we are. It is understood by the simple reasoning that when making estimates on the expected results of an investment which has extension in time from 1 - 10 years`s no doubt that the results for the first year will be more accurate than those for the year 10.

Deviation of returns over the years by taking the average value is greater the greater is the length of time of the investment. In view of the level of probabilities and expected average returns we can build the respective graphs of the distribution of probabilities of the two investments A and B.

2.4. Risk and return

The purpose of economic activity and of any economic entity, including financial institutions is the maximization of value. The process of achieving this goal permanently passes through the oscillations in the ups and downs of the inflows and outflows. During this process all the businesses of any nature, often experience asymmetric financial flows.

Value maximization and process of development and the growth of any business every time faces many risks associated with interference of multiple factors. Managing and minimizing these risks is one of the main objectives of finance. To achieve the stock price maximization the financial manager should be able to assess two basic factors of share prices: risk and return.

Every financial decision reflects a risk and a certain return, so all financial decisions should take into account the expected risk, expected returns and their impact on stock price. Risk can be examined for a single asset or for a portfolio of assets. Although the portfolio risk is probably the most important for the financial manager, the concept of risk is better developed and more understandable in the case of a single asset. But above all, we should clarify what is the risk, return and risk preference.

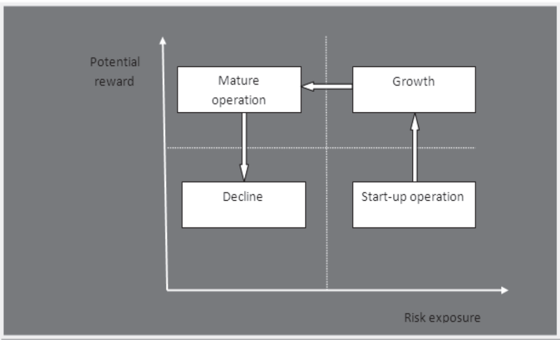

Figure 2. Risk and reward

In the context of return risk is defined as the possibility of losing. Risk is the possibility that actual cash flow (return) will change from a planned flow. More riskier activities are those with a greater chance to lose. Lack of certainty is connected closely with the concept of risk, Figure 2.

One thing that is not certain means that is riskier. So, the risk is associated with the uncertainty of the return of assets, savings and other assets invested. An investment would be risk free if the rebate of the initial investment is known with complete certainty.

Definition of return in the context of risk shows that the return on an investment is measured as the total gain or loss realized on behalf of the owner for a givenperiod of time. Return on investment for a period is measured by the difference of the value or the investment at the beginning and at the end of the period or by the rate of return.

3. Impact of risk in the organization

3.1. Introductory remarks

For a long time has been underestimated need for the risk management in the organization. Risk management is often seen as an imposed function and as an additional cost to the organization [1]. It is no longer acceptable for organizations to find themselves catched in a position where unexpected events cause financial loss, reputational damage and loss of presence in the markets. Stakeholders now expect from organizations to take full responsibility for the risks that may cause:

- Difficulties in the process of operations,
- Delay in the realization of the projects, or
- Failure of present alternative strategies[2].

After the shocks in world financial markets that occurred in 2008, all organizations are taking a greater interest in risk and risk management. It is increasingly understood that the explicit management of risks brings benefits. By taking a proactive approach to risk and risk management, organizations will be able to achieve the following three areas of improvement:

- Operations performance of the organization will become more efficient if the events that can cause obstructions in advance will be identified and managed. In this way, they can be prevented or minimized by the actions taken to reduce the possibility of anexpected events. These actions will help to reduce the damage and costs caused by these events, which can cause obstructions in the normal development and manufacturing operations.
- Processes developed in the organization will be more effective if taken into consideration prior selection of processes and risks involved in options that may be available. In this way the changes in processes related to projects that are already submitted will be more reliable and more efficient.
- Finally, the chosen strategy of the organization will be more effective if risks associated with various strategic options will be fully analyzed and will reach the best decisions possible. Efficiency refers to the fact that the chosen strategy to be implemented will be fully capable of delivering the required results.

The exposure presented by an individual risk can be defined in terms of the likelihood of the risk materializing and the impact of the risk when it does materialize. As risk increases, then likely impact will also increase. Throughout this paper, the term impact is used in preference to the alternative word, consequences. This is because the term impact is preferred in business continuity planning evaluations.

[1] Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 14-16

[2] Duckert, Gregory H., *Practical enterprise risk management: A business process approach*, Published by John Wiley & Sons, Inc., Hoboken, New Jersey. Copyright#2011 by John Wiley & Sons, Inc. f. 38-52

3.2. Impact of risk

Given that the final result from the activity of enterprises materializes in the financial result, consequently all potential risks will affect the amount of financial results. When it happens, we should consider the following:

- First, all possible kinds of risks, ultimately, affect the financial performance of economic entities;
- Second, in a segment, of the total risks, may be risks in conception and execution of financial strategy and financial policy of the enterprise, respectively realized risks within financial management (financial management) in the enterprise.

3.3. Impact of moral risk

Moral risks undermine objectives, and measuring the level of impact of such risks is of great importance. Risk management has its long history and origin in the management of hazard risks. Hazard risk management is closely related to the management of insurable risks. Remember that a hazard (or pure) risk can only have a negative outcome.

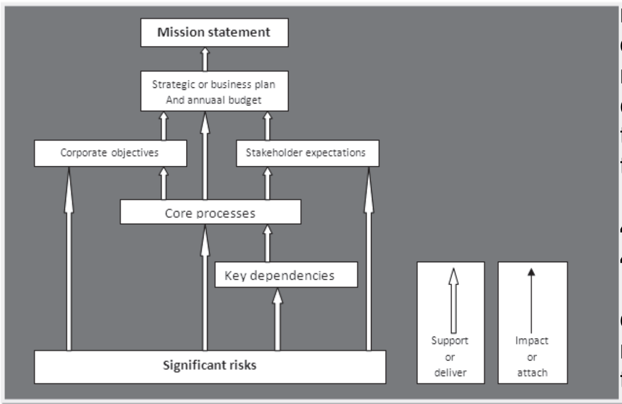

Figure 3. risks and business dependencies

Risk management deals with issues such as health and safety at work, fire pre- vention, damage to property and the consequences of defective products.

Pure risks can affect and disrupt normal operations, as well as resulting in increased costs and poor public- ity associated with disruptive events. Pure risks are related to business dependencies, including IT and other supporting services. There is increasing dependence on the IT infrastructure of most organizations and IT systems can be disrupted by computer breakdown or fire in server rooms, as well as virus infection and deliberate hacking or computer attacks, Figure 3.

Figure 3 shows that major risks can be connected with other features of the organization, not just with corporate objectives. Important risks can be identified by considering:

- the dependency of the organization,
- corporate objectives and / or expectations of the shareholders,
- and the analysis of the organization's core processes.

Risks are shown in the Figure 3, as being able to influence organization’s performance depending on the severity of the processes of the organization. These processes are a major components of the business model and can relate to operations, projects and cooperative strategies [3]. The purpose of Figure 3 is to show that major risks can be attached to features that are organizing other corporate objectives. Significant risks may be identified by considering the dependence of the organization, corporate objectives and expectations of stakeholders as well as from the fundamental analysis of the organization.

3.4. The positioning to the risk

Fundamental risk management techniques were initially developed by and for banks and later adapted by firms, insurance companies, pension funds, investment funds and industrial companies. The basic goal of risk management in the business firms is to identify market risk factors and their effects on the sustainability of earnings and to measure the effects of these factors. Firms need to take care permanently for risk and find ways of minimizing its impact on business. However, although firms are continuously engaged to manage the risk they often have no formal systems for monitoring their overall risk and impact assessment of different measures to reduce risk. It is very important to be considered all effects of risk during the planning and budgeting processes in order to realistically assess the firm's profit or loss.

4. The need for measuring and managing risk

4.1. Risk management

In the literature, risk management most frequently is defined as an established process of identification, measurement and economic control of risks, that threaten the assets, income, human life or some business enterprises. This definition of risk management is acceptable, we would say also applicable when it comes to technical and financial aspects of risk in general, especially when it comes to technical and financial aspects of risk in insurance. Risk management is an important factor of overall development and economic stability in the modern economy.

Quantification of risks and risk management in general, and in insurance in particular, is a complex process that passes through several stages:

- Identification of risks,
- Assessment of the probability and the severity of potential losses,
- Selection and application of more efficient methods and tools for risk control and coverage,
- Making decisions based on constant research of risks and effects of risks.

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[3] Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 19-20

Identification of risks, namely the discovery of existing risks to which are subjects the individualis, and businesses firms, respectively economy as a whole, through permanent observation of phenomena and consequences of those risks.

Assessing the probability and severity of potential losses, rather the assessment of the width and the dynamics of risk in terms of size and severity of damages (determination of maximum possible damages).

Selection and application of more efficient methods and tools of risk coverage, pursuant to the objectives and tasks of economic entities, which could be accomplished efficiently if possible damages occur.

Making decisions based on constant research of risks and effects of risks, evaluation of these decisions in terms of indicators that show how much will risk be reduced or eventually will be neutralized damages from various types of risk if those are hold, use of own insurance company for insurance or transfer of risks to specialized institutions for insurance and reinsurance.

Risk managers are first line officials working directly in risk management. They should have enough knowledge and know the risks of production process and the economic entity which is subject to risks. It is crucial for a successful risk management that persons working as officials in risk management have a personal interest in menaging risk of organization, in order to choose the appropriate method of risk coverage, which in the best way would be determined by the nature of th businesses firm.

Risk manager must be closely connected with all sectors of the economic entity in which it operates, especially with the accounting sector, financial sector, mark eting sector,manufacturing sector and the sector of human resources, because these sectors with their activities may act in terms of control and risk reduction. The success of entrepreneurship is essential for any economic entity, so the decision on how to protect from the risks, which risks can be hold and which must be transfered to insurance companies, all these policies can be decided only by officials acting directly in companies, or those who have full knowledge on technological process and other relevant elements of risk assessment[4].

It is very important that during the risk management process, risk managers estimate and quantify all risks so they can answer questions regarding risks that may be hold by company and risks that have to be transfered to professional insurance institution[5].

In large corporations, especially at multinational corporations, risk management is well developed and contains complex financial assessments regarding risk types and quantities, and the amount of necessary expenditures in order to achieve the necessary level of prevention from risks, in order to avoid economic damage caused by risks, which are not transferred to insurance companies.

In achieving their business policy enterprises conceive and realize their financial policy and financial strategy. In essence they carry out financial management. In the process of implementation of financial management, all undertakings are permanentlyfaced with certain risks. All these risks may have macro and micro aspect. In fact these are specific areas of risk management.

Rather these risks may be the result of a macroeconomic policy designed and improperly implemented, including financial policy in the broadest sense of the word. Also, these risks may also be the result of a business policy conceived and carried out improperly, respectively a wrong financial policy and financial strategy.

4.2. Managing risk in organization

Basic functions in the enterprise risk management should help to achieve the basic goals of the company, to mitigate and minimize risk in order to reduce negative consequences for the enterprise[6]. In this context we can conclude that the basic functions of risk management inenterprises:

- To inform on the potential harms and on affordable methods of protection, by using the economic analysis of expenditures of program for protection against risks (damage control measures), insurance premium costs, and costs of other methods of risk management;
- To create certainty for shareholders and management and avoid the fear of potential damage;
- Apply the provisions on the protection of facilities and production process, the installation of security equipment for protection at work, on compulsory insurance of property that serves as a guarantee for mortgages, on compulsory health insurance in case of injury at work and the patient from diseases etc.;
- Ensure business continuity of the economic entity providing compensation to replace professional key persons in cases of their departure from the company.

Risk maturity models can be used to measure the current level on risk culture within the organization. The longer the maturity period of risk, there are most consistent risk management activities within the routine operations undertaken by the organization.

5. Conclusion

Risk has always been and is associated with the activities of various organizations, but after the crisis

[4]Spedding, Linda & Adam Rose. *Business Risk Management Handbook: A sustainable approach*. First edition 2008. Copyright © 2008 Elsevier Ltd. Burlington, MA 01803, USA, 2008. f. 74-83

[5]Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 36-45

[6]Hopkin, Paul.*Fundamentals of risk management:Understanding, evaluating, and implementing effective risk management,* The Institute of Risk Management – IRM, Kogan Page Limited, London, UK, Philadelphia PA, USA, 2010. f. 225-232

in global financial markets that occurred in 2008, it was seen that up to this period managers were not taking risks very seriously. Therefore, after this period there is increased interest on risk management in a better way they can, in order to reduce risks and to achieve maximum benefits from these situations.

In this paper we have explained the significance of the impact of risk and the consequences for the organization. Risk threatens the organization's objectives. Depending on the market context where the organization operates, risks may be greater or smaller For instance, if we operate in a stable market, offer quality, products and services are trusted to consumers so we have loyal buyers, etc., our risks would be smaller compared to another enterprise that has just launched its business and operates in an unstable market with changing circumstances, where the risks are much greater.

However, it should not be considered only negative aspects of risk. Risk has his positive aspect too. The bigger the risk to an investment the greater the return, and vice versa. So the risk is often tempting for many entrepreneurs who want to achieve big returns.

On any analysis done on this subject conclusions are similar, risk can not be entirely eliminated. In fact this is why we have so many theories and writings on this topic. It is also the reason why numerous researches has been done in this area. Additionally there are also extensive researches on the past-risk situations; on how should we behave after that risk has occcured and how long will be the period of recovery; finally, all this makes risk an attractive topic to be studied.

6. Recommendation

Considering all this, we ought to protect against various future changes, in order to predict possible risks we may face. If working properly in this direction, there is a hope we will manage to protect against these risks. Alternative to this may have high costs, unpredictable damages and losses of people and funds.

We believe that organizations should seriously begin to do the analysis and conceptual projects regarding answers on question "what if?" Analysis and research must be done on how to reduce the gap between customer preferences and supply of products and services offered by the company, which would be the advantages or disadvantages if this would happen, which would be benefits for companies, and for customers and clients of organization.

By taking a proactive approach to risk, risk quantification, and risk management, organizations will be able to achieve improvement in these three areas: Operations performance in the organization will become more efficient; Processes developed in the organization will be more effective; The strategy of organization will be more efficient.

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