Risk Management (Elements and Process)

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A B S T R A C T
Objective: There have been various organizations that experienced irreparable failure despite many successes whether managers of these organizations have not been predicted these problems? Materials and Methods: Administrative techniques of organizations are applying a comprehensive plan of risk management to identify threats and assess undesirable consequences in order to reduce likely consequences. Results: Most organizations try to establish an effective risk management structure. Created risk in every organization should be controlled and managed, but sometimes even one problem may threatens professional management of organizations by its effect. In this situation manager should evaluate all available options, so that each option should meet customer’s satisfaction. Conclusion: Therefore, effective risk management needs a suitable regulatory framework and desirable expansion of institutes, markets, and infrastructure and desirable financial tools. It enables manager to identify uncertainties and manage them.

INTRODUCTION

Nowadays organizations work in complex and variable environment. In this situation organizations pay high attention to manage risk achieving goals and reducing undesirable effects of fluctuations. Risk in specific organizations occurs in commercialization stage that superior management of organization is goal-directed and believes in expertise to control the organization. So, the possibility of risk increases. Consequently risk management plays a vital role in today’s organizations [1].

Manager of organization should consider techniques of risk management as a basis to ensure not to confront with risks. Because these techniques emphasize on qualitative information to control risks in organization. Risk is a two-way sword for managers in organizations that can create chances for improvement of an organization and makes them ready to present. It also has talent to effect performance negatively [9]. Nowadays defeat in risk management can results in losing professional human force, losing business partners and market or income-creating chances or even complete failure of business. Organizations consider risk as an activate factor for business. This new view not only do not consider risk as a threat but also as a serious chance to create new products, new services and models to compete in the market [4].

Identity and definition of risk:
Risk means a danger that occurs because of lack of certainty in the future and the higher is this lack of certainty, the risk is higher. Investment dictionary considers risk as a potential loss that can be calculated. In other words risk is a kind of danger and chance [3]. Galitz defines risk as fluctuations in every income. It shows this subject that future possible changes for a specific index confronts us with risk whether positive or negative. For the first time Markotic introduced standard deviation as a numerical index for risk. Heyob defines risk as possibility to reduce income or losing capital. Therefore, two views can be presented for risk definition:

First view: Risk as every kind of possible fluctuations in economic output in future.
Second view: Risk as possible negative fluctuations in economic output in future (Taylor, 1997)

Risk management:
Some risks are result from methods that managers take to do their duties and most organization’s managers that fail to follow strategic planning mode, choose unreliable hypotheses and imaginations as a basis for
decision making. They believe that most of organization’s problem results from lack of success in supervision on organization. So that all the planning in the world cannot compensate a continuous supervision [1]. In other cases it is possible that managers of organizations use unsuitable jobs to identify expectations and needs of customers. If needs and expectations are not understood properly, it can results in poor decision making and ineffective business. Second if managers analyze required skills for organization, these factors increases organization’s risk and finally increases failure [5].

Situations and decisions that affect risk:

When manager of organization decides for organization based on rules, results of these decisions can have an inevitable effect on risk factors positively or negatively.

1. Starting or delaying: Usually managers decide to start an action or postpone it until facts become clear. Lack of action can put the manager under pressure and cannot do it in another time. On the other hand if managers react quickly the golden chance is lost or competitors take it [13]. In most situations manager can prevent this trap by analysis of situation or search other scenario and rely on other options by thinking. To do this action managers should put aside all styles and weigh every option and can choose the option with the least range [9]. There is not anything as a secure decision. Even lack of action has risks. The goal is to minimize potential benefits. In most situations control and calculation of risk even if there is potential to create minimum loss is better because future deviations will be disastruous [8].

2. Using present and future chances: The other important decision is whether invest on present chances or wait for future chances. Manager should consider both long-term and short-term goals when decision making. Future benefits should not be ignored. They may meet benefits of organization in comparison to short-term income. Therefore, most managers believe loses reduce in the future. When long-term and short-term deviations are compared, results show damages can be minimized by patience [13].

3. Position: When they want to plan projects, project managers are against risk-taking. When projects start deviated path, managers accept risk. Before starting an action, manager should determine for and against reasons of actions in long-term and short-term clearly. In addition future consequences identify advantages and disadvantages in relation to every action because there is not any guarantee for absolute security of every decision. Every position is unique and its value, limitations, pressures and environment should be examined. The security and trust of every decision can be increased by the following methods

A) Effective economic planning b) complete analysis of motivators that act beyond methodology c) complete analysis of factors and reasons for options d) quantity of decision making process e) using identical solution to minimize risk factors when risk is high [12].

Decisions that managers make in relation with managing risks depends on the present situation. Suitable planning and risk management is designed for cases that deviations are predictable. Therefore when these models can’t be predicted by manager or team, it is logical to prepare a realistic plan to perform during life of an organization [11].

Exciting and affective influences:

Feelings and excitement are powerful forces that can darken and destroy judgment of manager. A manager should tolerate emotional reactions and postpone decisions until facts become clear. Logical decisions are made based of analysis of all possible actions. It increases success and presents potential reasons for success. Manager should create a common chain of feeling between people and apply affective motivators for optional choices (Wunicke, 1992).

Risk motivated force:

Risk is dynamic and motivated. If risk plans were under control yesterday but there is no guarantee that predictable and unpredictable risks do not happen tomorrow, it is logical to manage and direct risk as a part for strategic and tactic planning. In planning stage, strategic planning to determine and identify operations is in priority and team uses this plan when a deviation occurs. Therefore, if a deviation occurs risk management minimize the ability to affect this deviation on organization and determines way to minimize these effects [11].

Risk analysis:

Risk analysis is a systematic evaluation of internal and external factors in an organization. Process, product or services that identify potential deviations. The goal is to use preventive actions and apply actions according to business limitations. In other words, in this analysis method, many potential deviated models which are possible according to technology, economy, time limitation and budget are identified. Manager tries to know organization by omission or minimizing deviated models that appear usually at the beginning of planning. Time gains main role during these actions (Taylor, 1997).

The following figure shows one step of risk analysis
Security and risk:
Every manager in the organization should apply security practices for customers. It means manager should consider security and safety instructions based on security standards in similar organizations. It is a rule that responsibility of every predictable action that threatens safety of workers is taken by manager. In most cases a manager of an organization is not responsible for consequences resulting from financial damages or sores if risks and damages are not logically predictable [7]. Therefore manager should make customer aware of security of design, construction and consumption of a product. This way customers observe security options. When these risks are inevitable a danger sign should be considered for customer. There is not anything called complete security. It is a supreme goal and manager should move towards it. Security should be important [3].

Risk management definition:
Risk management is a process by which an organization or investor reacts against risks. Risk management first identifies different risks and determines control method. In general risk management is the process of identification, assessment and controlling potential risks with possible consequences as damage or lack of change [1].

Risk management goals:

Main elements in risk management:
Risk management plan is successful when organization is consistent with strategic plans and financial strategy. Therefore, risk management in an organization should be conducted by people who are familiar with general subjects and know strategic goals of organization and have experience in risk management area and using its tools. Because using risk management tools have risks that results in undesirable results (Wunick,1992, and [11].

Main parts of risk management:
For better presentation, in table 1 main parts of risk management parts are offered [1].

<table>
<thead>
<tr>
<th>Table 1: The important parts of each main part.</th>
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<tbody>
<tr>
<td>Internal environment: philosophy of risk management, risk aptitude, managers, moral values and truthfulness, commitment to qualification, organizational structure, authority and responsibility, human resource standards</td>
</tr>
<tr>
<td>Goal setting: Leadership goals, related goals, selected goals, risk aptitude, risk tolerance threshold</td>
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<tr>
<td>Event identification: Internal risk, estimation of possibility and effect, data source, evaluation techniques, relationship between events</td>
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<td>Reaction to risk: Evaluation of possible reactions, selected reactions, portfolio view</td>
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<td>Control actions: combination of control actions with reaction to risk, Various control actions, trends and directions, information control system, specific control of business units</td>
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<tr>
<td>Information and relationship: data, relationship</td>
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<tr>
<td>Refinement: continuous refinement actions, separate evaluation, defect report</td>
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Risk management process:

Administration of risk management process makes managers and beneficiaries sure that documented every risk in the organization and behave according to that risk. Risk process includes six steps: Figure 2 shows this process [8] and [13].

![Fig. 2: Risk management process.](image)

Business analysis is the first step of this process. This process includes background of business and its activities. The main goal of this step is to know organizations’ processes to do other steps of risk management process. The following diagram shows input data, output data, and devices for the first step [9].

![Fig. 3: Parts of the first process.](image)

The second process is identification of risk. In this level both desirable and undesirable risks are identified. The output of this stage is risk identification. For each one an ID is prepared. The following diagram shows input data, output data and tools for the second step [8,9].
In the third step, probability and effect of identified risks in the previous step is estimated. The following diagram shows data input, data output and tools for this step [9].

In the fourth step which is called risk evaluation, acquires general effects. The following diagram shows the process of this step [8,9].
In the risk planning step, methods to face desirable and undesirable risks are performed. The following diagram shows process of fifth step [8].

![Diagram of Risk Planning]

**Fig. 3:** Performance of fifth process.

In the last step of risk management, performance of risk management is refined actively and revisions are made when it is necessary. The following diagram shows output data, input data, and tools for this step [8, 1].

![Diagram of Risk Management]

**Fig. 3:** the process of the last step.

*When is risk management sufficient?*

This subject depends on the amount of evaluation and management of the risk that each manager accepts according to performance indices.

Cost analysis-benefit: A point in which potential costs of one deviation for organization is equal with cost of effort to control risk [8] and Wunicke, 1992).

Company’s reliability and satisfaction of customer: You should not forget potential costs related to losing reliability and trust of customers in organization which are results of deviation in project. These costs are important [6].

Risk size: It is obvious that when magnitude and severity of one deviation is significant and risk possibility is high, it is economical to control it with time and money. Investment in this path is secure and logical [2].
Tolerance capacity: investment in risk management in an organization depends on tolerance level of manager to accept risk so that managers who have limited tolerance are not ready to invest in risk management and vice versa [11].

Pressure: pressure from higher managers, competitors, external people, environment and even economical pressure affects risk-taking in an organization. Pressures and stress should not oblige manager to make false decision that results in more risks. (Parasuraman and et al 1992).

It is necessary to omit imagination and mental points in the process of decision making. It requires being aware of customers, needs, expectations, priorities and limitation in the organizations. When balance is achieved that satisfaction of customers is in priority [6].

Conclusion and suggestion:
Risk management follows these goals in an organization.
1. Achieving goals of an organization is complementary to act with capacities and capabilities.
2. Coordinator of productive activities in relation to potential risks in an organization.
3. Risk management is a new concept to prevent and reduce danger. The main attempt of risk management plan is to present methods to prevent dangers, actions to control dangers and use opportunities.
4. Risk management should try to maintain and improve security.
5. Establish consistent trend of risk management.
6. Identification, measurement and controlling different risks.
7. Establishment of expert committees for risk management.
8. Modeling and risk management support rot risk-taking units.
9. Evaluation of organization’s capabilities to plan or use suitable tools for risk management.
10. Risk management helps financial managers to control risks and help others to reduce risks.
11. Discussion of managers to
12. Prevent and apply mechanism, to provide basis to evaluate significant risks related to goals and directions.
13. Support risk management plans in high levels of organization (especially superior management)
14. Having financial, human information resource to do risk management plans at decision making and performance level.
15. Clear understanding of risk.
16. Taking responsibility and being responsive to units and people for duties to present risk management programs.
17. Continuous revision of structure in risk management to identify improvement chances.

In general revision of this article determines risks that organization faces, what solutions are to analyze deviation and what logical solutions are suggested to reduce the effect of risk in an organization.

REFERENCES