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FEATURES OF ENTERPRISE RISK MANAGEMENT

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Abstract: Learned the characteristic of the risk in a company; the causes of occurrence of risk situations are revealed, methods for assessing risk situations and identified ways to eliminate the risk in the enterprise. Situation of risk in the company it is a main opportunity of company development. It is mean that in different cases company may manage of this risk and forward there to best way for the whole company.

Introduction

Situation of risk in the company it is a main opportunity of company development. It is mean that in different cases company may manage of this risk and forward there to best way for the whole company.

Risk - activities related to overcoming the inevitable uncertainty in a situation of choice, in which it is possible to quantitatively and qualitatively assess the likelihood of achieving the intended result, for example, disorders deviation from target [0].

1 Risk classification

Risk can come from both internal and external sources. The external risks are those that are not in direct control of the management. These include political issues, exchange rates, interest rates, and so on. Internal risks, on the other hand, include non-compliance or information breaches, among several others [0].

Thus, risks are divided into:

- Internal – planning, decision making, labour organization, human resources, technology, financial politic, labour discipline.
- External – politic, social-economic, crime and law, technical, climate, demographic, ecology [0].

Hazard identification is a process controlled by management. It is important to remember that a worker may perceive something as a hazard, when in fact it may not be a true hazard; the risk may not match the ranking that the worker places on it. After all basic steps of the operation of a piece of equipment or job procedure have been listed, we need to examine each to identify hazards associated with it. Some hazards are more likely to occur than others, and some are more likely to produce serious injuries than others.

The question to ask oneself is "Can any of these accident types or hazards inflict injury to a worker?" There are 11 basic types of accident [0]:

- Struck-against – Can the worker strike against anything while doing the job step? Identify not only what the worker can strike against, but how the contact can come about.
- Struck-by – Can the worker be struck by anything while doing the job step? This means that something moves and strikes the worker abruptly with force.
- Contact-with and Contacted-by – Can the worker be contacted by anything while doing the job step? The contacted-by accident is one in which the worker could be contacted by some objects or agent. Can the worker come in contact with some agent that will injure without forceful contact? Any type of work that involves materials or equipment that may be harmful without forceful contact is a source of contact-with accident.
- Caught-in and Caught-on – Can the person be caught in, caught on. Or caught between objects? A caught-in accident I one in which the person. Or some part of his or her body, is caught in an enclosure opening of some kind. Can the worker be caught on anything while doing the job step? Most aught-on accidents involve worker's clothing being caught on some projection of a moving object.
- Caught-between – Can worker be caught between any objects while doing the job step?
- Fall-Same-Level and Fall-to-Bellow – Can the worker fall while doing a job step? Two hazards account for most fall-to-same level accidents: slipping hazards and tripping hazards. The fall-to-below accidents occur in situations where employees work above ground or above floor level, and the results are usually more severe.
- Overexertion and Exposure – Can the worker be injured by overexertion; that is, can he or she be injured while lifting, pulling, or pushing? Finally, can exposure to the work environment cause injury to the worker?

These risks primarily concern the work of managers with human resources.

Before considering some of the specific techniques available for organizations to identify risks, several important factors should be noted about this process [0]:

- The end result of the process should be a risk language specific to the company or the unit, function, activity, or process (whatever is the focal point).

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• Using a combination of techniques may produce a more comprehensive list of risks than would reliance on a single method.

• The techniques used should encourage open and frank discussion, and individuals should not fear reprisal for expressing their concerns about potential events that would give rise to risks resulting in major loss to the company.

• The process should involve a cross-functional and diverse team both for the perspectives that such a group provides and to build commitment to ERM.

• Finally, the process will probably generate a lengthy list of risks, and the key is to focus on the "vital few" rather than the "trivial many".

Some risks are dynamic and require continual ongoing monitoring and assessment, such as certain market and production risks. Other risks are more static and require reassessment on a periodic basis with ongoing monitoring triggering [0].

2 Risk analysis methods

The quality of the analysis depends on the accuracy and completeness of the numerical values and the validity of the models used.an alert to reassess sooner should circumstances change. Both qualitative and quantitative techniques have advantages and disadvantages. Most enterprises begin with qualitative assessments and develop quantitative capabilities over time as their decision-making needs dictate (Table 1) [0].

Table 1 Measurement Techniques Comparison

Technique	Advantages	Disadvantages
Qualitative	• Is relatively quick and easy • Provides rich information beyond financial impact and likelihood such as vulnerability, speed of onset, and non-financial impacts such as health and safety and reputation • Is easily understood by a large number of employees who may not be trained in sophisticated quantification techniques	• Gives limited differentiation between levels of risk (i.e. very high, high, medium, and low) • Is imprecise – risk events that plot within the same risk level can represent substantially different amounts of risk • Cannot numerically aggregate or address risk interactions and correlations • Provides limited ability to perform cost-benefit analysis
Quantitative	• Allows numerical aggregation taking into account risk interactions when using an "at risk" measure such as Cash Flow at Risk • Permits cost-benefit analysis of risk response options • Enables risk-based capital allocation to business activities with optimal risk-return • Helps compute capital requirements to maintain solvency under extreme conditions	• Can be time-consuming and costly, especially at first during model development • Must choose units of measure such as dollars and annual frequency which may result in qualitative impacts being overlooked • Use of numbers may imply greater precision than the uncertainty of inputs warrants • Assumptions may not be apparent

Knowing the characteristics of a particular type and characteristics of risk exposure to the company, the business unit that exists in the company, able to develop some ways to overcome the negative effects of a plan or minimize risks. Risk analysis is through the arsenal methods and techniques available to the manager in its activities. Risk assessment is able to send this risk in favour of the company. In this case, actions concerning risk management to be relevant and do not affect the general principle in the company.

2.1 Methods of risk assessment

When we are talking about learning of the risk situation in the ompany we must first of all identifing this risk. After this risk-manager may identify tools which can helps to forward situation to development all organisation.

Some techniques for identifying risk are [0]:

• *Brainstorming*. This method combines all possible proposals in the team about eliminating the risk situation. The method helps to find the best options for working with risk, to find less costly solutions to the problem with a higher efficiency coefficient

• *Event inventories and loss event data.* In a brainstorming session or facilitated workshop (discussed later), the goal is to reduce the event inventory to those relevant to the company and define each risk specific to the company. The risk identification process can also be

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seeded by available loss-event data. A database on relevant loss events for a specific industry can stimulate a "fact-based discussion."

• *Interviews and self-assessment*. This technique combines two different processes. First, each individual of the organizational or operating unit is given a template with instructions to list the key strategies and/or objectives within his or her area of responsibility and the risks that could impede the achievement of the objectives. Each unit is also asked to assess its risk management capability using practical framework categories

• *Facilitated workshops*. After the information is completed and collected, a cross-functional management team from the unit or several units might participate in a facilitated workshop to discuss it.

• *SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis*. The strengths and weaknesses are internal to the company and include the company's culture, structure, and financial and human resources. The opportunities and threats consist of variables outside the company and typically are not under the control of senior management in the short run, such as the broad spectrum of political, societal, environmental, and industry risks.

• *Risk questionnaires and surveys*. A risk questionnaire that includes a series of questions on both internal and external events can also be used effectively to identify risks. For the external area, questions might be directed at political and social risk, regulatory risks, industry risk, economic risk, environmental risk, competition risk, and so forth. Questions on the internal perspective might address risks relating to customers, creditors/investors, suppliers, operations, products, production processes, facilities, information systems, and so on.

• *Scenario analysis*. Scenario analysis is a particularly useful technique in identifying strategic risks where the situation is less defined and "what-if" questions should be explored. Essentially, this technique is one way to uncover risks where the event is high impact/low probability.

• *Using technology*. Modern technologies can greatly help in dealing with the situation in the river. For example, the creation of a working group, where employees of existing units can communicate with each other and suggest options for influencing the risk situation.

• *Other techniques*. Other possible approaches for identifying risks include value chain analysis, system design review, process analysis, and benchmarking with other similar as well as dissimilar organizations.

3 Enterprise risk management

Classic risk management as seen in Enterprise-wide Risk Management acknowledges 4 ways of dealing with risk: Avoid, Reduce, Transfer, Retain or Accept. These four strategies can be illustrated using a risk matrix, where the impact of a certain event stemming from an exposure to a certain risk, is plotted against the probability of that event actually happening (Figure 1) [0].

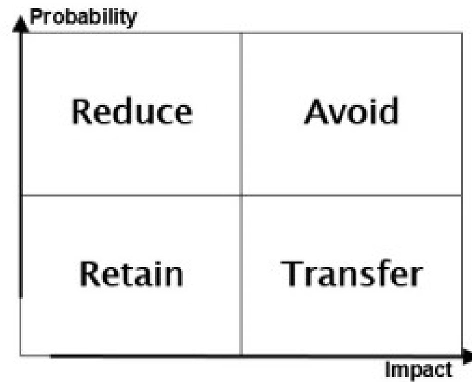

Figure 1 Risk matrix

Companies that succeed in turning risk into results will create competitive advantage through more efficient deployment of scarce resources, better decision-making and reduced exposure to negative events. Now is the time for senior business executives to begin applying a broad "risk lens" to the business (Table 2) [7].

Table 2 Enable risk management, communicate risk coverage

Audit committee and management expectations		**The RISK Agenda**		**Results lens**
		Strengthen risk governance and oversight Define risk strategy and oversight with accountability for risk management at the board and executive levels		***Value***: differentially invest in the risks that matter to generally development; improve controls around key business processes
Applying a broad "risk lens" to the business		***Integrate risk and performance management*** Embed an enterprise approach to risk assessment and monitoring into business planning and performance management		***Cost***: reduce overall cost of control spend by 30%; leverage automated controls more effectively

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		Coordinate multiple risk functions Improve leverage across multiple risk functions to expand coverage, reduce cost and enhance value to the business		***Risk***: align risks to corporate strategy; embed risk culture across the enterprise and reduce risk overlap through improved coordination
Company goals, strategies and business initiatives		***Enhance business-level performance*** Enable the organization to differentially manage key risks with optimized processes and controls at the business level		

Conclusions

Knowing the characteristics of a particular type and characteristics of risk exposure to the company, the business unit that exists in the company, able to develop some ways to overcome the negative effects of a plan or minimize risks. Risk analysis is through the arsenal methods and techniques available to the manager in its activities. Risk assessment is able to send this risk in favor of the company. In this case, actions concerning risk management to be relevant and do not affect the general principle in the company.

By creating a separate department of risk management, managers should give the head of the department certain powers, fill skilled workers, documented fix the limits and scope of responsibility assigned to managers and employees. Thus, a clear division of labor and organized work unit helps minimize costs that may arise in the process of overcoming the risk situation and professional staff able to direct risk for the further development of the company.

Risk is now becoming the fourth dimension of business. People were the first dimension. Process became the second dimension during the height of the manufacturing era. Evolving technology formed the third dimension. Embedding risk as the fourth dimension of business has the potential to fundamentally transform how organizations connect risk to reward.

References

[1] The Importance of Risk Management In An Organisation, [Online], Available: http://www.careersinaudit.com/article/the-importance-of-risk-management-in-an-organisation/ [15 Aug 2013], 2013.

[2] BALOG, M.: Production management. 1.vyd. Košice, p. 133, 2015.

[3] CHARLES, D. REESE: Occupational health and safety management: a practical approach, 2nd ed., p. 511, 2009.

[4] Enterprise Risk Management: Tools and Techniques for Effective Implementation - The Association of Accountants and Financial Professionals in Business, [Online], Available: https://www.imanet.org/insights-and-trends/risk--management/test?ssopc=1 [2007].

[5] CURTIS, P., CAREY, M.: Risk assessment in practise, 2012.

[6] Turning risk into results, [Online], Available: http://www.ey.com/Publication/vwLUAssets/Turning_risk_into_results/$FILE/Turning%20risk%20into%20results_AU1082_1%20Feb%202012.pdf, 2013.

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