

სამეწარმეო რისკ-მენეჯმენტის ძირითადი ასპექტები

ავალიშვილი მარინა
საქართველოს უნივერსიტეტი

სამეწარმეო რისკ-მენეჯმენტი მსოფლიო ეკონომიკური მეცნიერებისა და პრაქტიკის შედარებით ახალი მიმართულებაა. იგი ეფუძნება ტრადიციული რისკ-მენეჯმენტის მიდგომებს, მაგრამ ამავე დროს მისი წარმატებით განხორციელება საჭიროებს სპეციალური უნარ-ჩვევების განვითარებას. ყველა ორგანიზაცია თუ მეცნიერი, რომელიც სამეწარმეო რისკ-მენეჯმენტის პრობლემებზე მუშაობს, განსხვავებულად აყალიბებს სამეწარმეო რისკების კლასიფიკაციას და მართვის პროცესის ეტაპებს, მაგრამ ყველა მეთოდოლოგიაში საერთოა სამეწარმეო რისკ-მენეჯმენტის შემდეგი მახასიათებლები: (1). სამეწარმეო რისკ-მენეჯმენტი ორგანიზაციის მენეჯმენტის ნაწილია, რომელიც მიმართულია რისკების შემცირებაზე; (2) სხვადასხვა რისკების მართვა და მონიტორინგი ხორციელდება არა ინდივიდუალურად, არამედ კოორდინირებულად და ერთიანი სტრატეგიით. შესაბამისად, ეფექტიანი სამეწარმეო რისკ-მენეჯმენტის პირობებში კომპანიას შეუძლია გრძელვადიანი კონკურენტული უპირატესობა მოიპოვოს. (3). სამეწარმეო რისკ-მენეჯმენტი ზრდის კომპანიის ღირებულებას კომპანიის მფლობელებისა და მთლიანად საზოგადოებისათვის.

ინტერესი სამეწარმეო რისკ-მენეჯმენტისადმი ბოლო წლების განმავლობაში საგრძნობლად გაიზარდა, თუმცა მისი განვითარების დონე მნიშვნელოვნად განსხვავდება ამათუიმ ქვეყანაში. სამწუხაროდ, საქართველოში მეწარმეები ნაკლებად იცნობენ ამ სფეროს და რისკების შემცირების მარტივ მექანიზმებსაც არ იყენებენ, რაც უამრავი ფაქტორით არის განპირობებული. სამეწარმეო საქმიანობის რისკების კვლევა აქტუალური საკითხია როგორც მეცნიერების, ისე საქართველოს ბიზნეს სექტორის განვითარებისათვის.

Basic Aspects of Enterprise Risk Management

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Introduction

There has been a significant increase of interest in Enterprise Risk Management (ERM). What has changed during the last decades is treating the vast variety of risks in a holistic manner and elevating risk management to a senior management responsibility, although practices have not progressed uniformly through different industries and organizations. The general evolution toward ERM can be characterized by number of driving factors: More and more complicated risks; external pressures; portfolio point of view; quantification (advances in technology and expertise have made quantification easier); boundary less benchmarking; risk as opportunity. Increasingly organizations have come to recognize the opportunistic side, the value-creating potential of risk. Accordingly, risk management practices become more and more sophisticated.

Although enterprise risk management represents a return to the roots of risk management, in order to be involved with enterprise risk management, traditional risk managers need to obtain some additional skills. Traditional risk managers need to learn about VaR and other methods in order to engage comprehensive risk management process. Knowledge of portfolio theory as a method for dealing with correlated risks is also critical.

Since enterprise risk management involves so many different aspects of an organization's operations, and integrates a wide variety of different types of risks, no one person is likely to have the expertise necessary to handle this entire role. In most cases, a team approach is used, with the team drawing on the skills and expertise of a number of different areas, including traditional risk management, financial risk management, management of information systems, auditing, planning and line operations.

Enterprise Risks and Risk management Process

Enterprise risk management is, in essence, the latest name for an overall risk management approach to business risks. Precursors to this term include corporate risk management, business risk management, holistic risk management, strategic risk management and integrated risk management. Although each of these terms has a slightly different focus, in part fostered by the risk elements that were of primary concern to organizations when each term first emerged, the general concepts are quite similar.

The first enterprise risk management publication, presciently titled *Risk Management and the Business Enterprise*, was published in 1963, after six years of devel-

opment, by Robert I. Mehr and Bob Hedges. As initially introduced in this publication, the objective of risk management is “to maximize the productive efficiency of the enterprise.” The basic premise of this text was that risks should be managed in a comprehensive manner and not simply insured.

Casualty Actuarial Society (CAS) has adopted the definition of enterprise risk management as the discipline by which organization in any industry assesses, controls, exploits, finances and monitors risks from all sources for the purpose of increasing the organization’s short- and long-term value to its stakeholders. (CAS, 2003).

COSO (Committee of Sponsoring Organizations) defines enterprise risk management as a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. The definition reflects certain fundamental concepts. Enterprise risk management is: a process, ongoing and flowing through an entity; effected by people at every level of an organization; applied in strategy setting; applied across the enterprise, at every level and unit, and includes taking an entity level portfolio view of risk; designed to identify potential events that, if they occur, will affect the entity and to manage risks; able to provide reasonable assurance to an entity’s management and board of directors; geared to achievement of objectives in one or more separate but overlapping categories (COSO, 2004).

Scientists define enterprise risk management and classify the enterprise risks differently but it is clear that a new field of risk management is opening up, one requiring new and specialized expertise.

Recently, many developed countries have seen a tendency to change the rules of corporate governance. Traditionally, many people believed that a firm should serve only its shareholders. However, most people now believe that firms must satisfy the needs of all stakeholders, including employees and their families, the public at large, customers, creditors, the government, and others. A company should contribute to improving its communities and the environment.

Advantages of an integrated enterprise risk management approach include: alignment of risk at all levels to strategic objectives; accountability for and ownership of risk management; an ability to foresee and predict risk occurrence; taking preventative action - minimize costly time; optimization risk taking by the organization; capability to aggregate and correlate information about the current state of risk exposure at strategic, operating and process levels.

Direct Benefits of Risk Management includes:

(1) No Surprises - Early Warning Systems (identify, assess and prioritize risks; install appropriate control processes and information; promote organizational learning and knowledge transfer);

(2) Effective Responses - Good Reactions (integrate risks into planning and decision-making; strategically reduce exposure levels to acceptable levels; rapidly respond to issues and reduce negative impacts);

(3) Greater Chance of Success - Better Outcomes (maximize chances of achieving objectives; improve ability to anticipate and prepare for change).

A useful way to conceptualize ERM is along two dimensions: one spanning the types of the risks included and the other spanning the various risk management process steps.

The organizations working on enterprise risk management frameworks classify enterprise risks in different categories according to various risk characteristics.

The CAS categorized enterprise risks into four types:

< *Hazard Risks* (fire and other property damage; windstorm and other natural perils; theft and other crime; personal injury; business interruption; disease and disability; liability claims);

< *Financial Risks* (price; liquidity; credit; inflation/purchasing power; and hedging/basis risk);

< *Operational Risks* (business operations; empowerment; information technology and information/business reporting);

< *Strategic Risks* (reputational damage; competition; customer wants; demographic and social/cultural trends; technological innovation; capital availability; and regulatory and political trends).

An enterprise's sources of value, whether tangible or intangible, are inherent in its business model. They are affected by sources of uncertainty that must be understood and managed as an organization works to achieve its performance objectives. They may be external or internal. (PROVITI, 2006)

According to the PROVITI Business model, these three broad categories – environment, process and information for decision-making – provide the basis for understanding the sources of uncertainty in any business. *Environment risks* are uncertainties arising in the external environment affecting the viability of the enterprise's business model. *Process risks* (financial, Empowerment, information technology, governance, regulation, integrity and operations) are uncertainties affecting the execution of the business model, and therefore often arise internally within the organization's business processes. Because inadequate knowledge and information breeds more uncertainty, *information for decision-making risks* (strategic, public reporting and operational) are uncertainties affecting the relevance and reliability of information supporting management's decisions to protect and enhance enterprise value.

Meulbroek L.K. classifies enterprise risks into seven categories: operational risk, product market risk, input risk, tax risk, regulatory risk, legal risk and financial risk (Meulbroek L.K., 2008).

The steps of enterprise risk management are quite familiar to traditional risk management, but scientists also define them differently. Shawna Ackerman, a consultant at MHL/Paratus Consulting, lists these steps as (Ackerman, 2001): Identify the question(s); Identify risks; Risk measurements; Formulate strategies to limit risk; Implement strategies; Monitor results and repeat. Another consulting firm lists the steps as (ARI 2001): Identify risk on an enterprise basis, Measure it, Formulate strategies and tactics to limit or leverage it; Execute those strategies and tactics; Monitor process.

The following steps of the risk management process are described in the Australian/New Zealand Standard in Risk Management (AS/NZS 4360):

Establish Context – This step includes external, internal and risk management contexts. The external context starts with a definition of the relationship of the enterprise with its environment, including identification of the enterprise's strengths, weaknesses, opportunities, and threats ("SWOT analysis"). This context setting also identifies the various stakeholders (shareholders, employees, customers, community), as well as the communication policies with these stakeholders. The internal context starts with an understanding of the overall objectives of the enterprise, its strategies to achieve those objectives and its key performance indicators. It also includes the organization's oversight and governance structure. The risk management context identifies the risk categories of relevance to the enterprise and the degree of coordination throughout the organization, including the adoption of common risk metrics.

Identify Risks – This step involves documenting the conditions and events (including "extreme events") that represent material threats to the enterprise's achievement of its objectives or represent areas to exploit for competitive advantage.

Analyze/Quantify Risks – This step involves calibrating and, wherever possible, creating probability distributions of outcomes for each material risk. This step provides necessary input for subsequent steps, such as integrating and prioritizing risks.

For successful implementation of the enterprise risk management, it is crucial to understand role of the risk measures and modeling.

Most of the measures common in the practice of ERM can be placed in one of two categories: measures related to the degree of the organization's *solvency*, and measures related to the volatility of the organization's *performance*.

The measures in these two categories are used for distinctly different purposes and focus on distinctly different areas of the organization's risk profile. Following and complementing the narrative descriptions of these measures are illustrations and formulas where appropriate. Solvency-related measures are probability of ruin, shortfall risk, value at risk (VaR), expected policyholder deficit, tail VaR or tail conditional expectation, etc. Performance-related measures are variance, standard deviation, semi-variance and downside standard deviation, below-target-risk, etc.

Risk modeling refers to the methods by which the risk and performance measures are determined. The models used within any organization are typically customized to accommodate the unique needs of, and the specific risks faced by, that organization. The two general classes of stochastic risk models are statistical analytic models and structural simulation models. "Statistical" vs. "structural" refers to the manner in which the relationships among random variables are represented in the model; "analytic" vs. "simulation" refers to the way in which the calculations are actually carried out.

These models generally presuppose the existence of sufficient data with which to parameterize the models. This is often not the case in practice, particularly as respects operational and strategic risks.

There is a wide variety of risk modeling methods that can be applied to a specific risk. They differ by the extent to which they rely on historical data vs. expert input. We should take in consideration that models are not decision makers; people are. Therefore, the real issue is the culture that people have around modelling.

Integrate Risks – This step involves aggregating all risk distributions, reflecting correlations and portfolio effects, and expressing the results in terms of the impact on the enterprise’s key performance indicators (i.e., the “aggregate risk profile”).

Assess/Prioritize Risks – This step involves determining the contribution of each risk to the aggregate risk profile, and prioritizing accordingly, so that decisions can be made as to the appropriate treatment.

Treat/Exploit Risks – This step encompasses a number of different strategies, including decision as to avoid, retain (and finance), reduce, transfer, or exploit risk.

Monitor & Review – This step involves continual gauging of the risk environment and the performance of the risk management strategies. It also provides a context for considering risk that is scalable over a period of time (one quarter, one year, five years). The results of the ongoing reviews are fed back into the context-setting step and the cycle repeats.

The steps of enterprise risk management are the same, except for minor changes in wording, as those first enumerated by Mehr and Hedges in 1963.

Enterprise risk management in different countries and in Georgia

In developed countries, in an increasing number of industries boards of directors are required to review and report on the adequacy of risk-management processes in the organizations; researches and seminars are being conducted to explain the process, provide examples of applications and discuss advances in the field; universities are starting to offer courses titled enterprise risk management.

There has been a significant increase of interest in enterprise risk management in the last years. In 2008, Deloitte conducted ERM Benchmark Survey with a goal to capture and report feedback on the current state of ERM implementation for a cross-section of companies and industries (excluding Financial Services). In the survey, there were 151 company responses from North America, South America, and Europe representing consumer business, energy, manufacturing, process industries, and telecom and media. Most of these companies are mid-sized companies with annual revenues between \$1 - \$20 billion (Deloitte, 2008). Some key themes about ERM that emerged in the survey are:

- < Interest in ERM is growing, but 56% of respondents have had ERM programs in place for less than two years;

- < Regulation and regulatory compliance appear to be key drivers of ERM;

- < There is confusion about what ERM really means;

- < The primary goals of current ERM programs emphasize process and structure over outcomes;

- < Risk has not yet been fully incorporated into core business decision-making processes, such as strategic planning, capital allocation, and performance management;

- < The combination of lack of understanding of the benefits of ERM and difficulty in proving the business case is the biggest challenge facing ERM proponents;

- < The majority of respondents are not confident in the level of their organization’s preparedness for mission critical risks;

- < Organizations that report that they are better able to manage risk have a

more structured approach that has been in place for two years or more;

< Current ERM programs are typically focused on risks to existing assets and miss the connection to future growth.

In Georgia, enterprise risk management is not much developed. Particularly small and medium businesses do not use various types of risk minimization methods that are adopted in developed countries. That limits the development opportunity for companies. Taking in consideration unstable business environment of Georgia, enterprise risk management is crucial for companies' survival and effective functioning. There are many reasons that enterprise risk management is not used in Georgia, especially by small and medium enterprises:

- < Managers do not realize importance of the enterprise risk management;
- < Lack of the financial sources make difficult to form new department - risk management sub-system - in the companies' management system;
- < Shortage of the risk management specialist on the labour market of Georgia;
- < Financial instruments (Forwards, Futures, Options, Swaps, etc) of risk management are not developed in the country;
- < Lack of books or materials on risk management on Georgian language;
- < There are no think tanks working in this field;
- < Models and methods used for risk measurement and assessment are quite difficult and it requires special skills and appropriate education;
- < For successful implementation of the enterprise risk management it is important to have statistical data in organizations and for effective risk minimization it is needed to integrate risk management policy with business strategy.

It is clear that development of the enterprise risk management is important for all developing countries including Georgia to improve business performance and increase companies' value for shareholders and society. Special survey should be conducted to determine risks in different business sectors, quantitative and qualitative methods of risk assessment should be adapted and risk management instruments should be developed. Studying of Enterprise risk management is important for science and education system in Georgia and research will be much more valuable if we concentrate on defining the risk management system that would be easy to introduce and use in Georgian businesses.

References

- Meulbroek L.K. (2008). A senior Managers' Guide to Integrate Risk Management. In Monaham G. (Ed.), *Enterprise Risk Management* (pp. 63-87), John Wiley & Sons, Inc.
- Chew D.C. (2008). *Corporate Risk Management*, Columbia Business School, Morgan Stanley.
- Casual Actuarial Society, Enterprise Risk Management Committee. (2003). *Overview of Enterprise Risk Management*.
- Committee of Sponsoring Organizations of the Tread way Commission. (2004). *Enterprise Risk Management - Integrated Framework*.
- Independent Risk Consulting – PROTIVITI (2006). *Guide to the Enterprise Risk Management*.
- Baranof E., Brockett P.L., Kahane Y. (2006). *Risk Management for Enterprises and Individuals*.
- Delloite. (2008). *Perspectives on ERM and the Risk Intelligent Enterprise, Enterprise Risk Management Benchmark Survey*.
- Delloite. (2009). *Putting risk in the comfort zone, Nine principles for building the Risk Intelligent Enterpris*.
- Delloite. (2006). *The Risk Intelligent Enterprise, ERM Done Right*, Risk Intelligence Series, issue 1.