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A conceptual paper on Enterprise Risk Management

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ABSTRACT

This paper provides discussion on various concepts, theories, models and processes related to enterprise risk management. This conceptual review discussed the understanding, scope, process and challenges of Enterprise Risk Management. Communicating and monitoring risk management across the organization, best practices are also discussed in the paper. This conceptual paper explains ERM as the process, by which organizations in all industries identify, assess, control, exploit, finance, and monitor risks from all sources to increase value to its stakeholders.

Keywords: Enterprise Risk Management, ERM

1.INTRODUCTION

Risk is an undeniable reality of doing business, whether domestically or globally. As the world of business becomes increasingly borderless, risk management becomes, likewise, borderless, and thus more complicated. Enterprise wide risk management (EWRM) aims to manage different types of risks and provide a framework for sustainable competitive advantage. It can help a company to stabilize cash flows, reduce its risk of insolvency, and focus more effectively and efficiently on its primary business risks. The present paper aims to contribute certain theoretical understanding to the body of knowledge on enterprise risk management in corporations to sustain competitive advantage.

Risk

Risk stands synonymous with something unexpected and generally undesirable. It can be defined as ‘a variation in an outcome from expectation’. If an outcome is known, it is not a risk. Risk can be calculated quantitatively. Managing risk is an art that needs a scientific approach to be dealt with. The risk management offers two alternatives in a broad perspective. Risk can be replaced with certainty. Alternatively, only the adverse risk can be replaced. Different instruments are available for risk management under these two alternatives. Risk comes into picture if we have a choice to make. The world remains dull if it people do not take any risks. Nobody takes a risk if failure is certain. But to what extent one can take risk and manage it, to advantage the organization is a crucial question.

Risk and Uncertainty:

Every measured uncertainty becomes a, ‘risk’ and whatever risk is not measurable remains as ‘uncertainty’. Emmett Vaughan and Therese Vaughan, defines risk as ‘Risk is a condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hope for’. The term ‘risk’ is used in literature, can be defined alternatively as the choice of loss, the possibility of loss, uncertainty, the dispersion of actual from the expected results or the probability of any outcome from one expected.
Vernon L. Grose defined ‘risk’ as ‘the likelihood of injury, harm, danger or loss multiply by its potential magnitude’. Views expressed by **Bruce cDougall**, in the article ‘Risk management is Good Management’, in brief are as follows.
‘Every business, in every stage of its operation, is exposed to risks. How well a firm manages its risk without effecting performance depends on the risk management system put in place. Only when the firm knows the various types of risk it faces and the impact of each risk on its business, can evaluate ways of protecting itself from the losses arising from it. Thus, as identifying, evaluating and monitoring risk not only helps an organization to avoid costly mishaps but contributes to the quality of its management as well. Every one will try to maximize the return with the given level of risk or try to minimize risk with the given level of return.

Risk Management

Risk management is about balancing risk and reward. Striking an optimal balance between risk and return is not only important to the individual investor; it is also an imperative for business management. The focus is no longer on the relationship between risk and absolute return, but about the relative or risk-adjusted return.

Generally risk management is to eliminate or prevent the occurrence of adverse risk, Reduce the probability that the risky event will happen, reduce the severity of the event if it does occur, recover from the event if it occurs, rebuild business after the event and; prevent, reduce or eliminate the chance of a second occurrence.

Risk management is not just about finance, insurance or disasters. It's about running the business effectively and understanding, at the core, the fundamental risks facing the business. Running a business is all about managing risk. It's a strategic initiative, not a 'defensive' one." (Seethapathi K**,** 2002, pp.29-30)

Dealing with uncertainty in the environment:
From a strategic perspective, risk management is all about framing strategies that help a firm to survive and grow over a long period of time. When the environment is unfavorable, the firm will concentrate on survival and when it is favorable, it will attempt to exploit new growth opportunities. The ability of a company to adjust to the environmental depends crucially on the ability of its senior mangers to observe what is happening outside and prepare business plans accordingly.

Risk Management: An evolving discipline
"Fundamental objective risk management is to maximize business value to share holders by minimizing the cost of risk. When one considers the business risk management decision, the objective is to minimize the firm's cost of risk. When its individual risk management the objective is to minimize the individual's cost of risk. When it comes to public policy risk management decision, the objective is to minimize the society's cost of risk." Objective of the firm that do not have shareholders – maximize the value to the fund providers. For example tax payers, government or persons that donate money to finance the firm's operation. (Harrington and Niehaus, 2003)

Risk management is growing in importance
"Financial disaster that occurred worldwide was the lack of enterprise wide risk management. These losses were made more serious by the action of individual who took a gamble on behalf of their company and share holders without the necessary control mechanism to safe guard the capital of the organization." (Lisa K Meulbroek, 2002). The financial crisis again was observed in 2008 for bad credit risk management.

Change is always a major source of risk. In the 21st century, the pace of change in the business environment is continually accelerating and this dynamic business environment is enhancing the risk spectrum being faced by an enterprise. Risk analysis should be supplemented by vulnerability analysis that characterizes the forms of physical, social, political, economic, cultural and psychological harm to which individual and modern society are susceptible (Paul Slovic) Dependency on information technology, dependence on Middle Eastern oil, heat transportation and power; can threaten individual organization.

History has repeatedly demonstrated how bad things can and do happen to good companies. If anyone ever doubts that risk management is a critical issue for any business enterprise, can refer to the recent financial disasters since 2008. One notion in modern finance theory is that managing risk is not necessary because an investor can reduce risk through a diversified investment portfolio. Managing the risks of a business enterprise is the direct responsibility of its management, not of its shareholders.

Managing risk can reduce earnings volatility:
One of the key objectives of risk management is to reduce the sensitivity of a firm's earnings and market value to external variables. Companies exposed to interest rates, foreign exchange rates, energy prices, and other market variables can better manage earnings volatility through risk management.

Managing risk can maximize shareholder value:
Companies that undertake a risk-based program for shareholder value management typically identify opportunities for risk management and business optimization that can add 20 to 30 percent or more to shareholder value. (James Lam, 2003, P.8).

The concept of "lessons learned" and "best practices" were central to initiatives to raise risk awareness. Without a systematic process for capturing and learning from such incidents and losses, a company is more likely to repeat old mistakes that could potentially develop into a real crisis. According to a survey conducted by one of the leading consulting firms, in the Indian Investment Management Industry, out of the total sample, 50 percents of respondents revealed that they did not have documented risk management procedures. (Leslie Rahl and Zoubair Esseghaier, 2002)

New perspective on risk management- EWRM

ERM defined by (David R Koenig, 2003) "ERM is a managerial science, that helps to increase the firm value through maximizing returns relative to risk and slowly risk-based decision making is becoming a norm. Adhoc risk-based decision making may be the norms but a formal ERM program improves the understanding of one's own business. In turn allows the better use of resources and better decision making. ERM is full transformation of how business is conducted."

ERM means, 'A comprehensive and integrated framework for managing credit risk, market risk, operational risk, economic capital, and risk transfer in order to maximize firm value.' (James Lam, 2003, p.45)

'ERM is a rigorous approach to assessing and addressing of the risks from all sources that threaten the achievement of an organization's strategic objectives. In addition, ERM identifies those risks that present corresponding opportunities to exploit for competitive advantage.' (Jerry Miccolis and Samir Shah)

ERM is "a structured and disciplined approach that aligns strategy, processes, people, technology, and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it creates value. It is a truly holistic, integrated, forward-looking and process-oriented approach managing all key business risk and opportunities – not just financial ones – with the intent of maximizing shareholder value for the enterprise as a whole. (J.W.Deloach, 2000, p.5)

Traditional Risk Management and Modern Risk Management

Traditionally, companies managed risk in isolation. Market, credit, and operational risks were treated separately and often addressed by different individuals within an institution. Corporate functions such as finance and audit handled other operational risks, and senior managers addressed business risks. However, risks are highly interdependent and cannot be segmented and managed by entirely independent units.

ERM seeks to consolidate exposure types not just across financial risks but also across non-financial perils and hazards. It distinguishes all risks facing a company through some form of common lens, such as that provided by risk measurement frameworks like VaR. ERM is an attempt to consolidate the risk management process organizationally across systems, processes, and people. As expressed by (Vedpuriswar, 2004, p.151), "For any enterprise, the sources of risk are connected to business strategy. Various risks faced by an enterprise must be considered along with the financial risks".

ERM is all about integration

Enterprise risk management requires an integrated risk organization. This most often means a centralized risk management unit reporting to the Chief Executive Officer (CEO) and the board, with responsibility for broad policy setting across risk taking activities, requires the integration of risk transfer strategies. ERM approach takes a portfolio view of all types of risk within a company and rationalizes the use of derivatives, insurance, and alternative risk transfer products, other strategically moves to hedge only the residual risk deemed undesirable by management.

ERM's enhances shareholder value that can be achieved through:

Improving capital efficiency by providing an objective basis for allocating resources and reducing expenditure on immaterial risks. Organizations can exploit natural hedges to manage risks. It also supports informed decision making process to uncover areas of high-potential adverse impact and identify areas of "risk based advantage." It also builds confidence amongst the investors by establishing a process to stabilize results by protecting them from disturbances and by demonstrating proactive risk stewardship. (jerry miccolis and samir shah, p. 32)

Scope of EWRM:

Risk management has been strongly associated with derivatives, treasury, forex and portfolio management. It should not be so. Risk is all about vulnerability. Several factors contribute to this vulnerability. So, it is obviously incorrect to equate risk with fluctuations in financial parameters such as interest rate, exchange rates or stock indices.

As the Economist (February 10, 1996) put it:" Top mangers often fail to understand properly the firm's sensitiveness to different types of risks. This is because the technology for identifying risk exposures in non-financial firms is as yet fairly, primitive, but more fundamentally because managers and boards too often regard risk management as a matter for financial experts in the corporate treasury department rather than as an integral part of corporate strategy".

Today, companies which take risk management seriously are at different stages. Some view ERM primarily as a control activity while others are exploring the opportunity to maximize shareholders' wealth. Based on the internal approach to

ERM, (Christopher L Culp, 2002) it divides companies into three categories-_Classical risk controllers, Efficiency enhancers and Risk transformers.

Classical risk controllers invest in risk management process and systems in order to minimize losses. They look at risk management not as source of opportunity, but as a cost centre. Such companies typically themselves of the services of third parties for risk management and risk transformation products.

Efficiency enhancers look at risk management from a strategic perspective. They view risk management as a way to operate their businesses more efficiently and effectively. Instead of pre-designed software solutions, they use customized consulting services.

Risk transformers view risk management primarily as a business opportunity. They graduate from companies demanding risk management services to ones which can provide clients assistance in managing their risks.
ERM addresses some fundamental questions like What are the various risks faced by the company? What is the magnitude of each of these risks?, What is the frequency of each of these risks?, What is the relationship between the different risks? , How can the risks be managed to maximize shareholders' wealth?

Process of EWRM:

Understanding the business :
Achieving a full understanding of the present conditions in which the organization operates; this includes understanding the external as well as internal business environment and the risk management practices prevailing in the organisation.

Identifying Risks:
Documenting the conditions and events, those represents material threats to the organization's achievement and its objectives or represent areas to exploit for competitive advantage.

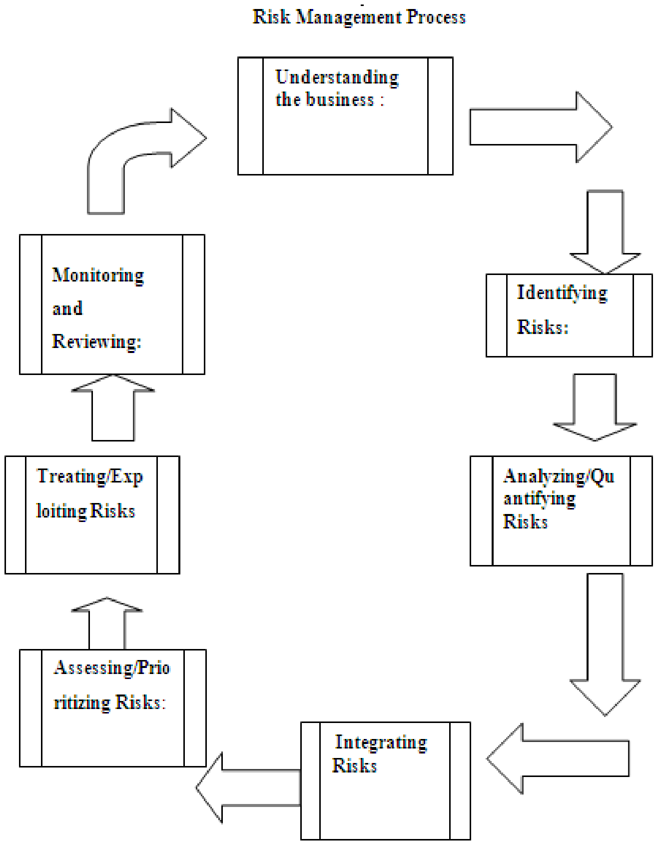
Analyzing/Quantifying Risks:
Wherever possible, creating probability distributions of outcomes for each material risk.

Integrating Risks:
Integrating all risks and expressing results in terms of impact on the organization's key performance indicators is an important process.

Assessing/Prioritizing Risks:
Determining the contribution of each risk to the aggregate risk profile of the company, and is prioritizing accordingly for mitigation.

Treating/Exploiting Risks:
Developing strategies for controlling and managing the various risks that has been identified by the company

Monitoring and Reviewing:
Continuous monitoring of the risk environment and the performance of the risk management strategies by the company is essential for benchmarking.



Almost all leading consultants like Arthur D Little, Towers Perrin("enterprise risk management),Arthur Andersen ("integrated risk management") ., Andersen Consulting , Aon Risk Services, Willis Corroon , Coopers & Lybrand("Generally Accepted Risk Principles"), Ernst & Young , Deloitte Touche ("enterprise risk management) , KPMG Peat Marwick , Boston Consulting Group, Stern Stewart ("Economic Value Added") and Glodman Sachs, globally agreed upon the EWRM process discussed above.(H Felix Kloman, Feb. 1999).

Communicating ERM:
Vince Covello director for the 'centre for risk communication' suggested 21 guide lines for effective risk and crisis communication. (Risk Newsletter, vol. 21, No 4) Listen to, acknowledge and respect public fear and anxieties, uncertainty. When people are upset they want to know that you care before they care what you know, Be honest, ethical, frank and open, recognizing that there are limits on what needs to be disclosed. Provide information on frequent basis; prevent information vacuums that can be filled by the others.

Role of Board of Directors
The board of directors should create annual reviews of risks policy and appetite for risks. They must be involved in approving risk limits and monitor policy expectations by being proactive. The same is argued by (Susan Rucker, 2003) although board committees can focus on specific risk areas, it should be seen that boards avoid a compartmentalized approach. Directors can use a number of techniques to achieve an integrated approach to risk, including the establishment of a chief risk officer.

Business managers should be acknowledge about all aspects of the business, including high-level business and operational process, key drivers of revenue and cost, and the major risks and key exposures involved (i.e, "know the risks")

A prerequisite of effective risk management is that there should be a system of checks and balances to prevent any given individual, or group of individuals, from gaining excessive power to take risks on behalf of an organization. Organisation must keep your eye on the cash, It's therefore important to make sure that there are appropriate safeguards for managing cash positions and cash flows. These include basic controls, such as authorized signatures to initiate, approve, and make cash transfers. An integrated set of risk measures should provide management with timely information on all types of risks faced by the company, including actual (ex-post) and "early warning" (ex-ante) risk indicators.

The other side of performance measurement is the issue of compensation and incentives. Organizations need to take a close and careful look at how compensation and incentives are designed and implemented, and whether or not they reinforce desired behavior and performance. As one of professor at UCLA once said “if you go into a company and see smart people doing stupid things, 9 times out of 10 they are being paid to do so. (James Lam, pp 21)

Much of the focus of risk management has been on risk assessments and audits; risk management policies and procedures; systems and models; measures and reports; and risk limits and exception processes. Apart from these establishing any’s risk culture and values, facilitating open communication for discussing risk issues, escalating exposures, and sharing learned and best practices, providing training and development programs, reinforcing desired behavior and results through performance measurement and incentives are important. An organization open to learning is less likely to repeat past mistakes, and more likely to benefit from new developments and innovations in the field of risk management.

The Chief Risk Officer (CRO):
(In the paper ‘The Emerging Role Of The Chief Risk Officer’ by Jerry Miccolis and Chuck Lee) argues that traditionally, organizations managed the various risks by treating them separately and assigning someone to mange each risk. Executives had put up with this “segmented”, approach to risk management for a long time, though they were not satisfied with the whole approach because it tended to ignore the interdependencies among the various risks. One solution is to appoint a chief risk officer who could co-ordinate closely with the individual risk managers. Many activities need considerable time of management so a strategic post is needed to manage all risk holistically. In general; the office of the CRO is directly responsible for: (James Lam, pp 49)

CRO’s roles are defined because they represent a core competency that is critical to the sustainable competitive advantage for the company. Managing risk on an integrated and enterprise-wide basis is a vital issue confronting executives. The CFO is a key decision-maker in crafting the company’s strategy. (Thomas L Barton, William G Shenkir, and Paul L Walker)

Linking corporate governance and ERM
The focus on corporate governance in general has provided a great deal of impetus for changes in corporate risk management practices. Some of the codes of best practice on corporate governance explicitly cite risk management as a key responsibility of the board. Companies with poor corporate governance practices often have poor risk management skills, and vice versa. Unethical practices and low standards of corporate governance can severely damage the reputation of a company. (Vedpuriswar A V, 2001)

Challenges of RM:
The level of sophistication with which risk management function is performed has advance significantly in recent years. But still there are important problems, which need to be addressed to improve the function’s effectiveness. (Carl Batlin and Barry Schachter) like Risk Management Application, Risk Types and Risk Measurements and Implementation Issues.

Why does the risk management process fail?
First, when the right information is not given at the right time to the right people, a gap are created between actual risk and desired risk
Secondly, if the organization fails when the costs involved in managing risk outweigh the benefits derived out of it thirdly, the risk management can fail by artificially forcing itself into the risk control category and thereby neglecting the potential efficiency gains across the rest of the company. Companies simply do not see the benefits of risk management, outside the pure risk control box. Economics of scale and economics of scope are left unexploited, real options are left unrecognized, strategic opportunities are missed, positive NPV investments are ignored and this list goes on and on.

Failure of risk management results in an increase in the costs of financial distress and the opportunity costs of the projects foregone. When a firm starts faltering financially, the creditors demand higher interest rates and more collateral. Valued employees may leave the firm and suppliers may reduce the size of shipments. The stock market reduces the valuation of the share and clients may decline long-term contracts.

Integrated risk assessment:
Integrated, or strategic or holistic, or enterprise risk management is a new objective to look at financial market, political, legal and operational risk together rather than separately. The biggest problem facing us however is how to

measure these risks in terms of their potential likely hood , their possible consequences , their correlations and public perception of them i.e. current challenge of risk management. EWRM is not to manage risk individually but ‘enterprise wide’.(H Felix Kloman ,99)

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