CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION

The recognition of a more risky business operating environment has led several organisations to address, control and manage the risks. Risks and uncertainties usually occur in various forms such as financial risk, strategic risk, hazard risk or operational risk.

Enterprise Risk management is not just buying insurance for a company. It also involves dealing with both insurable and uninsurable risks and the choice of the appropriate techniques for dealing with them. The emphasis of risk management is to reduce the cost of handling risk by the most appropriate means. Risks are usually occurred by:

- Hazards such as fire, tornado or hurricanes, theft, piracy, vandalism, crime.
- Internal operation exposes caused by safety and security practices, workers' compensation, and employee dishonesty.
- Uncertainties created by mishandling money or making poor investment decisions for an employee or pension fund.

Every organisation has a strategic plan which is continually revised and updated to understand the organisation's mode of operation and capabilities as well as its strategic goals. Failure to meet specific objects of the proposed activity should be one of the set of risks to be managed.

Enterprise risk management (ERM) is a systematic approach to manage risks. It is considered on a business basis, internally and externally, that are used in both private and public companies with the enterprise risk management are now being developed in parallel to the pre-existing performance management systems. The performance measurement and risk management have much are similar in both the design and usage that the creation of two distinct systems is not optimal. Drawing on existing performance and risk management literatures and case studies, this study propose a system to manage the enterprise risks. The system will deliver significant efficiency benefits to the enterprise risks while retaining the effectiveness of existing strategic management control system.

1.2. RATIONALE OF THE STUDY

In the past, many organisations had focused mainly on financial risks which they have ignored the impacts of the operational risks which are caused by the failure to meet specific objects of the strategic plan. Nowadays these organisations realised the severity and impacts of operational risks which it could be regarded as cause-and-effect between operations and profitability. Moreover the listed companies in the stock exchange, namely the Public Company, are required by the corporate governance to manage their enterprise risks in every perspective. So the enterprise risk management system has been developed to cope with both financial and operational risks in each industry.

The scope of risk covers all risks, internal and external, that may prevent an organisation to meet its objectives. Enterprise Risk Management is a structure and disciplined approach that align strategy, processes, people, technology and knowledge with the purpose of evaluating and managing the uncertainties that the organisation faces as it creates values. Therefore the goal of enterprise risk management initiative is to manage the uncertainties that could either negatively or positively influence achievement of organisation's objective (Barton et al., 2002).

Table 1.1: View of Enterprise Risk Management

From	То		
Separated types of risk	Business risk		
Multiple mitigation programmes	Integrated business risk management		
Compliance	Commitment		
Staff driver	Line driver		
Audit	Self driven		

Source: Unocal Corporation

Risks can be divided into two main groups, Internal Risks and External Risks. Internal risks, namely Operational Risks, are the uncertainties within the company's operations, this kind of risks could be controlled by the risk management system. External risks are the uncertainties that beyond the company's influence which they are very difficult to manage, this kind of risks are usually caused by the economic and political factors.

Keey (2000) defines Operational Risks as a practical likelihood of a specific hazard being realised thorough engineering activity given the actual workplace practices, management priorities, constraints and pressure. Hence, enterprise risk management in engineering industry is concerned with mechanisms of recognising and facing threats to a technology-based organisation before they have a chance to inflict expensive and possibly irreparable damage. These threats may have a technical origin, but normally the prime cause is poor management of engineering processes and facilities.

1.3. STATEMENT OF PROBLEMS

In the highly competitive aviation market, airlines face continuous pressure to ensure customer satisfaction, and to increase profitability and growth. The industry is characterised by razor-thin margins, so the best path to an improved bottom line is through tightened financial controls and reduced costs. In an environment where many uncertainties are beyond the company's influence, such as fuel costs that fluctuate with the market, and labour costs that are set by union guidelines and labour contracts, maintenance is one area in which an airline does have the ability to exert some risks controls. As a result, airlines are being challenged to increase their overall maintenance efficiency.

The case organisation is an engineering department of an international airline which the strategic plan is revised and updated annually to define the mode of operation as well as its strategic objectives. Failure to meet specific objects of the proposed activity should be one of the set of risks to be managed.

Moreover the case organisation does not have any risk management system. Only the Balanced Scorecard is being used as a strategic management control. Balanced Scorecard and its key performance indicators (KPI) cannot inform the managers about the uncertainties and unexpected risks that may affect the organisation. Only the organisational strategic performances are measured. Some risk-related measures have been excluded from the system. The 'risk early warning system' has never been introduced.

1.4. OBJECTIVE OF THE STUDY

The objective of this study is to establish the enterprise risk management system for the case organisation.

1.5. SCOPE OF THE STUDY

The study is based on the Strategic Plan of the year 2003 and is restricted to the internal risks in the department, which are usually found in the following operations:

- 1. Maintenance Operations
 - a. Aircraft Line Maintenance
 - b. Aircraft Heavy Maintenance
 - c. Aircraft Engine Overhauls
 - d. Aircraft Components Overhauls
- 2. Organisation and Management

As there is time limitation, the study cannot include the system implementation and ongoing monitoring.

1.6. EXPECTED OUTCOMES

There are two major outcomes from the study, they are.

- 1. Risk mitigation plan which contains action plans to mitigate the potential risks;
- 2. Risk early warning system which comprises of key performance indicators. It will assist the performance measurement system to monitor the unexpected risks.

1.7. EXPECTED BENEFITS

Benefits to the researcher are the lessons learnt about:

- 1. organisational behaviour regarding group decision making process.
- 2. risk assessment using cause-effect analysis.
- 3. how to link risk management to the organisation's strategic plan.

Benefits of an enterprise risk management to the case organisation include:

- 4. Risk early warning system can determine what the balanced scorecard, performance measurement system, has excluded.
- 5. Management will be informed about the unexpected risks.
- 6. Saving costs by using the risk information to streamline business operations.

1.8. METHODOLOGY

The study is subdivided into five phases as follow

Phase 1: Literature Study

Study the related literatures and case studies.

Phase 2: Data Collection

Conduct a workshop with managers and staffs at the case organisation by using

- Group decision making / Decision analysis
- Participatory Management

Phase 3: Enterprise Risk Management System

Identify and assess the risks using cause-effect analysis;

Development of risk mitigation plans;

Define the key risk measures;

Establish the risk early warning system.

Phase 4: Conclusion

Summarise the research.

Suggest further research.

Write up the fist draft.

Step 5: Thesis Write Up

Correct the mistakes and present in the standard format.

The work plan is shown in table 1.2.

Table 1.2: Work Plan

Step	November 2003	December 2003	January 2004	February 2004	March 2004
1					
2					
3			A		
4					
5					

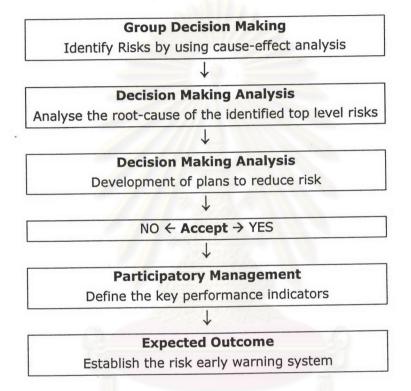


Figure 1.1: Research Framework

Two theories are involved in this study, Group Decision Making and Participatory Management.

- Group Decision Making is the act of choosing one alternative from among a set of alternatives decision-making process. Recognising and defining the nature of a decision situation, identifying alternatives, choosing the best alternative, and putting it into practice.
- 2. Participatory management encourages involvement of stakeholders at all levels in analysis of problems, development of strategies and implementation.