CHAPTER FIVE

RISK MITIGATION AND REPORTING

5.1 Introduction

Risk mitigation and reporting are fundamental components of effective risk management in any organization. Risk mitigation and reporting form the backbone of a proactive risk management approach, facilitating the identification of opportunities, the preservation of assets, and the achievement of strategic objectives, while effectively managing and responding to uncertainties.

5.2 Risk Mitigation Strategies

Risk mitigation involves the strategic actions taken to reduce the likelihood of adverse events occurring and to minimize their impact if they do. Techniques for managing risk are classified broadly as either:

- *Risk controlling techniques:* refers to techniques that reduce the frequency or severity of losses
- *Risk financing techniques:* refers to the techniques that provide for the funding of losses.

5.2.1 Risk Controlling Techniques

As noted above, risk control is a generic term to describe techniques for reducing the frequency or severity of losses. Major risk-control techniques include the following:

- Avoidance
- Risk prevention
- Loss reduction

1. **Risk Avoidance**

Risk Avoidance is one of the techniques for managing risk. Risk is avoided when an individual refuse to accept the risk. This is accomplished by merely not engaging in actions that would give rise to risk. For example, a person can avoid the risk of being mugged in a high crime area by staying out of the vicinity; avoid the risk of divorce by not marrying; and a business firm can avoid the risk of being sued for a defective product by not producing the product. Not all risks should be avoided, however.

2. **Risk Prevention**

It aims at reducing the probability of loss so that the frequency of losses is reduced. For example, Auto accidents can be reduced if motorists take a safe-driving course and drive defensively. The number of heart attacks can be reduced if individuals control their weight, stop smoking, and eat healthy diets. Loss prevention is also important for business firms. For example, strict security measures at airports and aboard commercial flights can reduce acts of terrorism. Boiler explosions can be prevented by periodic inspections by safety engineers; occupational accidents can be reduced by the elimination of unsafe working conditions and by strong enforcement of safety rules; and fires can be prevented by forbidding workers to smoke in a building where highly flammable materials are used. In short, the goal of loss prevention is to reduce the probability that losses with occur.

3. **Loss Reduction**

Strict loss prevention efforts can reduce the frequency of losses; however, some losses will inevitably occur. Thus, the second objective of loss control is to reduce the severity of a loss after it occurs. Risk control is achieved through safety and loss prevention programsFor example, a department store can install a sprinkler system so that a fire will be promptly extinguished, thereby reducing the severity of loss; a plant can be constructed with fire-resistant materials to minimize fire damage; fire doors and fire walls can be used to prevent a fire from spreading

5.2.2 Risk Financing Techniques

Risk financing refers to techniques that provide for the payment of losses after they occur. Major risk-financing techniques include the following:

- ■ Risk Retention
- ■ Noninsurance transfers
- ■ Insurance

4. **Risk Retention**

Retention is an important technique for managing risk. Retention means that an individual or a business firm retains part of all of the losses that can result from a given risk. Risk retention can be active or passive. *Active Retention* Active risk retention means that an individual is consciously aware of the risk and deliberately plans to retain all or part of it. For example, a business firm may deliberately retain the risk of petty thefts by employees, shoplifting, or the spoilage of perishable goods by purchasing a property insurance policy with a sizeable deductible. In these cases, a conscious decision is made to retain part or all of a given risk. *Passive Retention* Risk can also be retained passively. Certain risks may be unknowingly retained because of ignorance, indifference, laziness, or failure to identify an important risk. *Self-insurance* is a special form of planned retention by which part or all of a given loss exposure is retained by the firm.

This is another technique for managing risk. The risk is transferred to a party other than an insurance company. A risk can be transferred by several methods, including:

- ***Transfer of Risk by Contracts:***Undesirable risks can be transferred by contracts. For example, the risk of a defective television or stereo set can be transferred to the retailer by purchasing a service contract, which makes the retailer responsible for all repairs after the warranty expires. The risk of a price increase in construction costs can be transferred to the builder by having a guaranteed price in the contract.
- ***Hedging Price Risks:*** Hedging is a technique for transferring the risk of unfavourable price fluctuations to a speculator by purchasing and selling futures contracts on an organized exchange

5. Insurance

Insurance is the most practical method for handling major risks. Risks may be transferred from one firm to another that is more willing and is capable of bearing the risk. Insurance is a mean of shifting or transferring risk, in consideration of specific payments (premiums).

5.3 Key Risk Indicators (KRIs)

Risk monitoring indicators, also known as Key Risk Indicators (KRIs), are specific metrics or measurements that organizations use to assess the status and trends of identified risks. These indicators provide quantifiable and actionable information about the likelihood and potential impact of risks. Here are some common categories of risk monitoring indicators:

1. Financial Risk Indicators

- Debt-to-Equity Ratio: Measures a company's financial leverage and potential risk of insolvency.
- Cash Flow Adequacy: Indicates whether an organization has enough cash on hand to meet its financial obligations.

- Profit Margin Variability: Tracks fluctuations in profit margins, which can indicate market volatility or cost management issues.

2. Operational Risk Indicators

- Incident Frequency: Tracks the number of operational incidents, such as accidents, errors, or system failures.
- Downtime Duration: Measures the duration of unplanned system or production downtime.
- Employee Turnover Rate**:** High turnover can disrupt operations and increase training costs.

3. Compliance and Regulatory Risk Indicators

- Number of Regulatory Violations: Tracks instances of non-compliance with regulations.
- Pending Legal Actions: Measures the number of pending legal actions or regulatory investigations.
- Compliance Audit Findings**:** Indicates the results of internal or external compliance audits.

4. Market and Economic Risk Indicators

- Market Volatility: Measures fluctuations in financial markets, such as stock market indices.
- Economic Indicators: Tracks economic factors like GDP growth, inflation rates, and unemployment.
- Customer Demand Variability**:** Monitors changes in customer demand for products or services.

5. Supply Chain and Supplier Risk Indicators

- Supplier Performance Metrics: Measures the performance of key suppliers in terms of on-time delivery, quality, and reliability.
- Lead Time Variability: Tracks variations in lead times for critical supply chain components.
- Inventory Levels**:** Monitors inventory levels to ensure they are within optimal ranges.

6. Cybersecurity and Information Security Risk Indicators

- Number of Security Incidents: Measures the frequency of security breaches or cyberattacks.

- Phishing Attempts: Tracks attempts to deceive employees through phishing emails.
- Patch Management Delays: Monitors delays in applying security patches and updates.

7. Environmental and Sustainability Risk Indicators

- Carbon Emissions: Measures an organization's greenhouse gas emissions.
- Waste Generation: Tracks the amount of waste generated by operations.
- Resource Efficiency: Measures the efficient use of resources like water and energy.

8. Reputational Risk Indicators

- Social Media Sentiment: Monitors social media sentiment and online reputation.
- Customer Complaints: Tracks customer complaints and their resolution.
- Media Coverage**:** Measures the extent and tone of media coverage related to the organization.

9. Credit Risk Indicators (Financial Institutions)

- Non-Performing Loan Ratio: Measures the proportion of loans that are not being serviced.
- Credit Default Swap Spreads: Indicates the cost of insuring against the default of loans or bonds.

5.4 Risk Monitoring

Risk Monitoring Systems are structured frameworks and processes that organizations or projects establish to systematically observe, assess, and track risks in real-time or periodically.

5.4.1 Need for Risk Monitoring

The need for risk monitoring systems and indicators in organizations is paramount for several important reasons:

1. Early Risk Detection:

Risk monitoring allows organizations to detect potential issues and threats early in their development. This early detection enables proactive intervention and risk mitigation measures to prevent or minimize adverse consequences.

3. Adaptation to Changing Environments:

Business environments are dynamic, and risks are constantly evolving. Risk monitoring systems help organizations adapt to changing circumstances, including shifts in market conditions, regulations, technology, and geopolitical factors.

4. Protection of Assets and Value:

By continuously tracking risks, organizations can protect their assets, investments, and brand value. Timely risk response strategies can prevent financial losses, reputational damage, and operational disruptions.

5. Compliance and Regulatory Requirements:

Many industries and sectors have regulatory requirements that necessitate the monitoring and reporting of specific risks. Risk monitoring systems help organizations demonstrate compliance and avoid legal and financial penalties.

6. Stakeholder Confidence:

Effective risk monitoring and reporting build stakeholder confidence. Investors, customers, partners, and employees are reassured when organizations have robust risk management practices in place. Transparent risk communication fosters trust.

7. Performance Improvement:

Monitoring key risk indicators provides insights into the performance of various aspects of the organization. By addressing risks systematically, organizations can identify opportunities for process improvements, cost reductions, and efficiency gains.

5.5 Factors Affecting Choice between Retention and Transfer

a) Legal Economic and Public Policy Limitations

Significant limitations apply to transfer of risk especially non-insurance transfers.

i) A contract may transfer only part of the risk that the organization though it had shifted to someone else.

ii) The language is often so complicated that legal action may be required for the meaning to become apparent.

iii) Courts interpret transfer provisions narrowly due to their being that broad shifts of responsibilities are often declared invalid by being out of tune with public policy or being grossly unfair to the transferee.

iv) Since contracts vary widely there are few precedents for courts to follow.

v) If the transferee is unable to pay the transferor must bear the loss.

vi) The transferee who has the major incentive for loss control may lack the expertise or authority for effective control

b) Degree of control

When an organization has little or no control over the outcome, transfer becomes attraction. The larger the degree of control the more attractive retention becomes over transfer. Insurance weakens incentives to prevent or reduce loss because losses are compensated *moral hazard*. As a consequence, the premium for insurance coverage is higher than what it would be if some mechanisms for manifesting the loss prevention incentives were present. The results are increase in the cost of insurance relative to retaining the loss. Retention therefore increases the incentives of the organization to establish the loss-prevention and loss mitigating activities. From a public policy perspective, society benefits when the burden of loss falls on the party best equipped to control the loss producing events.

c) Loading Commission, financial services fees and other transactions costs

Loading fees and transaction costs represent the amount by which the cost of transfer exceeds the expected value of the benefit payments from the transferee. Holding other factors constant higher loading fees increase the attractiveness of retention. Loading commissions are fees charged for providing the insurance service. Fees charged by banks other financial institutions for services such as providing letters of credit or other financial commitments are other examples. Securities transactions also entail transaction costs, when options are used to hedge risk the transaction cost are incurred in buying and selling securities to maintain the hedge.

d) Value of services provided by insurers and other financial institutions

Loading fees and transaction costs are not necessarily wasted money. In many cases loading fees are compensation for providing services that the transferee would provide itself in the absence of the transfer. A bank may provide valuable advice to a client in arranging a letter of credit and the bank's compensation may come from arranging the required letter of credit. Insurers have the advantage that they can spread overhead costs over many insureds. They offset to some exert the services would have been provided by the risk manager. These would otherwise spare the risk manager time in selecting the insurer, negotiating terms of the insurance contract and the price to be charged and filling a proof loss with the insurer in case of a loss.

e) Opportunity Costs

Evaluation of insuring a risk versus retention should consider the investment income that should be earned during the time between payment of the insurance premium and the ultimate payment of the claim. Investment income reduces the cost of a given claim. This is often evaluated by comparing the present value of retention costs to the present value of insuring the risk. In the absence of market restrictions or institutional constraints, one would not expect the opportunity set of investments to differ between insurers and organizations that retain risks. Similarly, one would expect insurance premiums to reflect anticipated investment income.

f) Tax Considerations

Generally, insurance companies tend to receive favourable tax treatment relative to consumers of insurance. Insurance companies are allowed to deduct from current taxable income their provision for future claim payment. A firm paying claims using its own funds in contrast cannot deduct payments from taxable income until economic performance occurs (claim payments). Holding other factors constant, the tax-induced effects place insurers at the greatest advantage relative to heavily taxed organizations, but this advantage declines with lowly taxed forms or non-taxed firms. When tax related effects are believed to be important, experts in tax accounting and tax law may be consulted to evaluate appropriate methods for risk financing.

g) Retention may be the only possible method

In some case, retention is the only possible, or at least the only feasible tool. The organization cannot prevent the loss, avoidance is impossible or clearly undesirable, and no transfer possibilities (including insurance) exist, consequently the organization has no choice but to retain the risk. A firm with a plant in a river valley or an earthquake proves area may find that no other method handling the flood) earthquake risk if feasible. Abandonment and loss control would be too expensive and no insurance cover available

5.6 Risk Reporting

Risk reporting is the essential practice of communicating pertinent risk information to stakeholders, providing them with the necessary insights to make informed decisions and ensure the organization's resilience in the face of challenges.

5.6.1 Risk Reporting Strategies

1. **Written Reports**

These are comprehensive written reports that detail the organization's risk landscape, risk assessment results, mitigation strategies, and key risk indicators. These reports are typically used for board meetings, executive summaries, and regulatory compliance.

2. **Dashboards and Data Visualization Tools**

Risk Dashboards refers to the Visual presentation of risk data using charts, graphs, and other data visualization techniques. Dashboards provide an at-a-glance view of key risk indicators and trends.

3. **Email Communication**

Timely email alerts or notifications sent to stakeholders when specific risk thresholds or triggers are breached. This method is often used for critical or urgent risk events.

4. **Meetings and Presentations**

These can be achieved through Board, management and staff meetings. Risk discussions and presentations during meetings to inform members and staff about the organization's risk exposure and risk management efforts.

5. **Intranet and Portals**

Online portals or intranet platforms where employees can access risk-related information, reports, and resources. This provides a centralized repository for risk documentation.

6. **Social Media and Collaboration Tools:**

This refers to the use of Internal Social Media. It Utilizes internal social media platforms or collaboration tools to share risk-related content, updates, and discussions within the organization.

7. Webinars and Web Conferences:

This is achieved through Virtual Meetings, by Conducting webinars or virtual conferences to discuss risk-related topics with remote or geographically dispersed stakeholders.

9. External Reports and Disclosures

Annual Reports: Include risk-related disclosures in the organization's annual reports to inform shareholders and investors about risk exposure and management strategies.

5.7 Role of Government in Risk Management

Governmental agencies are involved in loss control because;

(a) Public interest often demands loss control and quick response to emergencies.

(b) Governmental entities can provide certain services such as those of fire department more efficiently and economically than can scattered firms.

(c) The government agencies exercise this responsibility through education, statuses and codes regulating building construction, working conditions, safety equipment and clothing, sewage disposal facilities and operation of motor vehicles

(d) The government ensures risk control through inspections designed to enforce the status and codes, police fire departments, rehabilitation programs, assembly and dissemination of data released to loss prevention etc.