

# Nuts and Bolts of Microfinance - Risk Management

## I. INTRODUCTION

The nature and potential consequences of business risks that an organization face each day is becoming more complicated and of great significance as we enter the new millennium. The rate of economic growth, increasing complexity in the global economy, higher customer expectations, intense competition, the dramatic impact of business controls breakdown, changes in technology, various economic and political events, and countless other factors all affect organizations in ways for which managers often find themselves unprepared.

## II. BUSINESS RISK DEFINED

Business risk is the threat that an event or action will adversely affect an organization's ability to achieve its business objectives and execute its strategies successfully.

Risk is a fundamental fact of business life: there is no business activity, which can be guaranteed to produce a risk-free business operation. Every enterprise attempts to maximize profit by managing the risk it undertakes in its selected area of business and avoiding risk which it does not wish to undertake itself. Risk may mean different things to different people. But any risk will inevitably create financial consequences.

For financial institution, when they issue loans, there is a risk of the borrower defaulting. When a financial institution collects savings and lends them on to other clients, they put client's savings at risk.

Each company has its own unique set of constantly changing business risks. Risks are either internal or external to the firms and some are difficult or impossible to control. Sources of risks are as follows:

- Natural event
- Political circumstances
- Economic circumstances
- Technology
- Human behavior
- Commercial and legal relationship
- Management distribution and controls

***Managing risk is complex task especially in a world where economic events and systems are linked. Companies should neither avoid risk (thus limiting their scope and impact) nor ignore risk (at their folly). Risk is not always bad, however risks are what prevents us from meeting our goals. Those who prosper in today's world do not depend on historical data and performance, they depend on the ability to identify and manage future risks. It is sometimes necessary to take risks to achieve something great.***

### III. WHAT SOURCES OF VALUE NEED TO BE PROTECTED?

**Physical Assets** – Land, Building, Equipment, and Inventory

**Financial Assets** – Cash, Receivables, Debt, Investments, and Equity

**Customer assets** – Customers, Channels, and Affiliates

**Employee and Supplier Assets** – Employees, Suppliers, and Partners

**Organization Assets** – Strategy, Knowledge, Values, Systems, Innovation, and Brands

### IV. WHAT ARE POTENTIAL CONSEQUENCES OF UNMANAGED RISKS

Unauthorized Use	Broken Promises
Poor Performance	Inadequate Information
Insufficient Sources of Debt or Equity	Significant Losses of Clients or Suppliers
Inadequate Liquidity	Loss of Markets
Inefficient Use	Loss of Morale
Reputation Loss	Work Stoppages
Obsolete or Unclear Strategies	Poor Relationships
Lack of Institutional Learning	Excessive Costs

### V. TYPES OF RISK FACED

#### Institutional Risks -

**Social Mission** – MFIs are vulnerable to social mission risk if they do not have a clearly defined target market and monitoring mechanisms to ensure that they are providing appropriate financial services to intended clientele.

**Commercial Mission** – If an organization does not set interest rates high enough to cover costs, depends on other institutions to provide support and/or if organization is not managed as a business then the organization is at risk of not being self sufficient or able to operate in the long term.

**Governance Risk** - This risk refers to an MFI having inadequate governance or a poor governing structure.

Some areas that can heighten this risk are:

- Poor management succession planning
- Unwillingness to hold the institution to same rules as a bank
- Shareholders do not have a financial stake
- Members of the Board tend to think as a donor instead of an owner
- Clients are members of the Board - they think in their best interest instead of the institution
- Board tries to manage the institution instead of governing
- Insufficient time to fulfill functions
- Lack of meetings
- Lack of separation of roles between BOD and management

The governing structure should request from management the following reports to help them do their work more effectively: *portfolio quality, balance sheet and income statement, cash flow statement and any Internal Audit reports.*

**Reputation Risk** - This is a risk to earnings or capital from negative public opinion which may affect an MFI's ability to sell products and services or access capital or cash funds. *Remember it is much easier to lose reputation than to build it.*

**Succession Planning Risk** - Lack of planning in this area even in the branch offices creates the risk that operations will be handled by inexperienced or under qualified manager in cases where qualified person leave the organization. This can greatly affect the morale and motivation of all staff.

**Information Risk** – It is the risk of uncertainties over the relevance and reliability of information that supplies our value-creation decisions.

**Management Risk** – Risk of portfolio or business deterioration due to management defects due to insufficient qualification or opportunistic behavior.

**Human Resource Risk** – This is the risk that you hire inappropriate or incorrect staff and management to operate your MFI which leads to inefficiencies and ineffectiveness. It can also relate to retention of staff. If there is continuous and large turnover of key management and staff, it will certainly affect performance of MFI.

**Institutional Culture Risk** - This is the risk that the internal working and communication norms are not followed and/or observed. In addition, this also affects the morale of staff. Poor development of institutional culture can affect the performance of staff and eventually MFI if not properly developed.

**Project Management Risk** – This risk is multi faceted – communication amongst team members, time requirements, micromanagers, lack of a champion, accountability without authority, expectations, lines of authority etc are many of the risks faced. This can even become more complicated when a consultant joins the team.

## **Operational Risks -**

**Credit Risk** - It is the risk to earnings or capital due to client's failure to meet terms of a lending agreement. Due to short term and the unsecured nature of microlending, loan portfolio tends to be volatile since the portfolio quality can deteriorate more rapidly than in traditional financial institutions.

MFI's should have clear expectations of 100% on time performance, minimized accounting and administration procedures and borrowers making frequent payments to help reduce this risk.

**Common Error Risks** - This risk basically refers to human or computer error within the daily service or product delivery.

**Transaction Risk** - Exists in all products and services. The risk grows as the number of transactions grows. Examples include:

MIS does not correctly reflect loan tracking. There is a lack of effectiveness and insecurity in the MIS (no back ups, no internal safety functions, inaccurate and untimely reports). There is inconsistency in the loan and accounting system data. There is no aging of the portfolio outstanding. Rescheduling or refinancing is treated as on time repayment.

To avoid this risk, MFI's should use simple and standard procedures, incorporate internal controls into daily work, minimize the number of times data needs to be entered manually and ensure MIS is secure and backed up.

**Fraud Risk** - See Fraud section.

**Rapid Growth and Expansion Risk** - This refers to the risk that the MFI will not have the capacity to groom new managers to handle the growth in locations and clients. This will lead to inexperienced managers running the operations of the institution and to the huge risk of mission drift.

An MFI will need to pay careful attention to staff recruitment and training, develop internal control systems, prepare staff for changes, carefully monitor loan growth and portfolio quality and maintain good communication between the offices.

**Research and Development / New Product Development Risk** - This refers to the risk of potential losses that can result from a product that fails or causes unintended harm. This could be a judgment error in the allocation of resources to the cannibalism of one product over another. An important area to include in product development is MIS so the reporting does not mask problems of one or more products.

**Security Risk** – This risk concerns the exposure of the MFI to theft such as safety of cash and office assets.

### **Financial Management Risks -**

**Liquidity Risk** - This is the possibility of negative effects on the interests of the owners, customers and the other stakeholders of the MFI resulting from the inability to meet current cash obligations in a timely and cost efficient manner. This usually arises from management's inability to adequately anticipate and plan for changes in funding sources and cash needs.

Efficient liquidity management requires maintaining sufficient cash reserves on hand while also investing as many funds as possible to maximize earnings. The greatest concern for an MFI is if it is taking deposits then it must maintain confidence in the institution or face a run on the bank.

**Interest Rate Risk** - This is the risk of financial loss from changes in the market interest rates. Interest rate risk arises when the cost of funds goes up faster than an MFI can adjust or is willing to adjust its lending rates.

Banks and MFIs have a separate Treasury Department whose main function is to manage the risk with interest rate changes.

**Foreign Exchange Risk** - This is the potential for loss of earnings or capital resulting from fluctuations in currency values. MFI's often experience this risk when they borrow or mobilize savings in one currency and lend in another.

**Portfolio Risk** – This risk refers to the risk inherent in the composition of the overall loan portfolio. Policies on diversification (avoiding concentration in a particular sector or area), maximum loan size, types of loans, and loan structure lessen portfolio risk.

**Investment Portfolio Risk** - Refers to mainly to longer-term investment decisions rather than short term liquidity or cash management decisions. Investment portfolio must balance credit risks, income goals, and timing to meet medium and long term liquidity needs.

It is best to stagger investment maturities to ensure funds are available when needed. In addition, the Board of Directors should establish policy parameters for acceptable investments.

**Subsidy Dependence Risk** – Risk of dependence on subsidy donors and/or a sudden stoppage in subsidies.

**Credit Risk** – Risk that an obligor (a person or institution) who is indebted to another is unable or willing to pay.

**Death, illness, and disability benefits to Employees Risk** – This is the risk of legal liability for injuries or other harms to employees. Policies should developed how to handle each, type of compensation, amount, etc. based on laws of country.

## **External Risks -**

**External Business Environment Risk** - This refers to the inherent risks of an MFI's business activity and external business environment. MFI's need to check the validity of their assumptions against reality on a periodic basis and respond accordingly.

Some common risks associated with this area are geographic, seasonal/weather, demographic (preferences, illness and death rates, mobility of population, education and experience levels) competition and local authorities (willingness to support, corruption, political tensions, etc).

In addition, the MFI also needs to monitor industry trends and suppliers of capital/equity changes and new influences that might necessitate a response.

An MFI must design a process to monitor systematically the environment for significant changes in the competitors, markets, customers, and other factors beyond the organization's control.

**Regulatory and Legal Compliance Risk** - These risks arise out of violations of non-conformance with the laws, rules, regulations, prescribed practices, contracts and/or ethical standards of the country. The cost of non-conformance range from fines, lawsuits, voiding of contracts, loss of reputation, business opportunities and/or shutdown.

**Macroeconomic Risk** – These risks are related to devaluation and inflation. Consideration should be given to how the risks will affect the MFI as well as client, their business and ability to repay their loans.

#### **Client Household Risks -**

**Market Risk** – Unfavorable price changes in inputs or output can reduce or eliminate profits. Disruptions in business services such as marketing channels and transport can put at risk both the business and MFI loan. Increase of consumer goods or a loss of employment could also be considered in this risk area.

**Natural Risks** – Risks related to nature are particularly important for production activities that rely heavily on natural processes, such as farming, retail trade and small scale manufacturing based on natural materials.

**Political Risks** – Risks refer to the chance of loss due to exercise of power. Some examples are riots, wars, unfavorable acts by government, etc.

**Personal Risks** – Risks are related to crisis in the family – sickness, death, spousal abandonment, diseases such as alcoholism, expensive rituals dowries, etc.

**Community Risk** – Risk is related to social conditions where the clients are situated.

## **VI. WHAT ARE ATTRIBUTES OF BUSINESS RISKS?**

- Could be Existing
- Could be Emerging
- Presents Exposure to both Tangible and Intangible Assets or Sources of value
- Can be Internal or External
- Presents Exposure (downside) if not Managed Well or a Potential Opportunity (Upside) if Managed Well

## **VII. WHAT IS RISK MANAGEMENT?**

Managing risk is a continual process of systematically:

- Identifying the risks facing the organization and assessing their severity
- Using a continuous feedback loop
- Measuring the risks appropriately and evaluating the acceptable limits for that risk
- Monitoring the risks on a routine basis, ensuring that the right people receive accurate and relevant information
- Managing the risks through close oversight and evaluation of performance

By conducting these activities, it allows the MFI to identify not well thought out risks and determine what to should be done. By just taking time, it can reduce the threats faced by the MFI.

There are two elements that are essential to an integrated approach to managing business risks:

**Develop a common language.** In order for the approach to be integrated and organization-wide, all contributors to the risk management equation must be able to communicate easily and quickly. Companies must develop a "common risk language" that all members of the organization can embrace and understand. Developing a common language is a critical first step to improving overall business risk management processes. A common language facilitates "four-way" communication about risk across functions, divisions or departments, as well as up and down the various level of management.

Some key terms would be:

**Balance** – Are we managing the right risks?

**Completeness** – Are we proactively identifying and managing our key exposures?

**Coordination** – Are the efforts well coordinated?

**Effectiveness** – Is the mitigation of risks monitored?

**Compliance** – Are policies and processes established being complied with?

**Accountability** – Who is responsible for exposures, monitoring and measuring?

**Develop an effective organizational control structure.** Risk is widespread and constantly changing, which makes it difficult to identify and manage. An effective control structure helps the organization learn how to anticipate critical business risks and to adapt business risk control processes to avoid or minimize those risks. The evolving organizational controls structure comprises strategic control processes and management control processes.

Risk Management protects and adds value to the organization and its stakeholders through supporting organizational objectives through:

Providing a framework

Improving decision making and planning

Protecting assets and images

Compliance

## **VIII. RISK MANAGEMENT STRATEGY**

Risk Management process is not static: It is part of a constant information flow from the field to the head office and then back to the field. These processes are designed to continuously assess the effect of changes in environment risks on the business, formulate business risk strategies and align the organizations with those strategies. In a rapidly changing and competitive environment, effective processes are needed because the viability of today's business strategies grows shorter with each day.

### **Step 1 - Identify, assess and prioritize risks**

The risk assessment identifies the source and measures the root causes of threats to achieving the objectives of the MFI. The risk assessment provides a clear context for evaluating and designing risk controls.

How to identify risks – It can not be accomplished alone! It should be approached in a methodical way. Significant activities should be identified. This can be accomplished by a review of the paperwork (plans, assessments, budget, historical information, market and other

assessments, performance indicators, SWOT, etc. Group loans should be separately evaluated from individual loans.

Another step would be the use of the list of typical risks and review it during a meeting of key management, staff and other key stakeholders. See previous list of MFI risks and the list of other common risks from handouts.

One can also develop a Risk Template form which risks can be documented for review and for new risks to be recorded as identified. Please see the template handouts for an example.

### Risk Map

<b>I M P A C T</b>	High Impact / Low Likelihood	High Impact / High Likelihood
	Low Impact / Low Likelihood	Low Impact/ High Likelihood

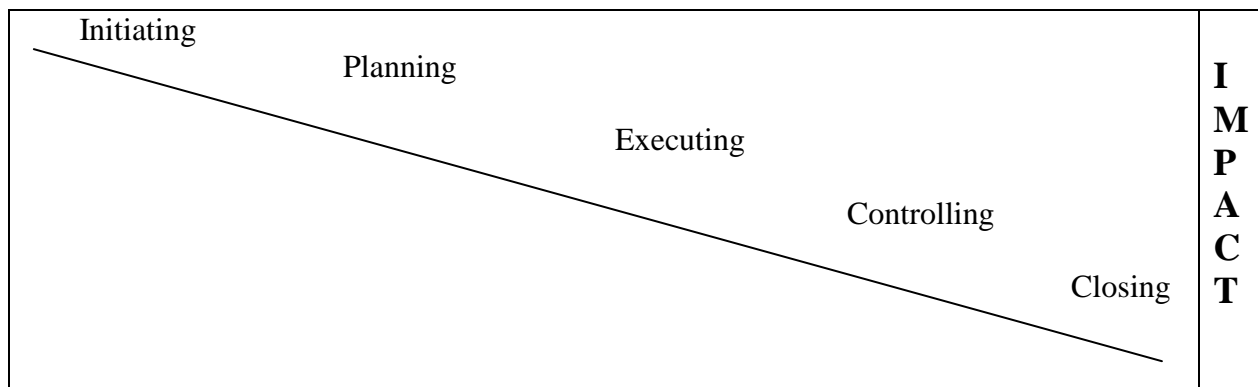
<b>LIKELIHOOD</b>
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**Important point:** Risks are potential events – problems are current. Problems are not risks they are crisis management.

Risks are different during different times and stages of process or time of the year.



## Propensity of Risk



## Probability

Another method to assist in measuring risk is the Risk Management Matrix. The matrix assists managers to assign ratings to different risks and prioritize those areas that need additional support. The matrix also assigns who is responsible for monitoring and implementing improvements for that risk. This matrix should be periodically updated.

The greatest time commitment is the creation of the matrix. However, once established, it becomes a useful management tool that can be used to set priorities and define scope of works for audits.

## Sample Risk Management Matrix

Business Risk or Activity	Quantity of Risk	Quality of Risk Mgmt.	Aggregate Risk Profile	Direction/ Trend	Risk Manager
<b>GROUP LENDING:</b>					
Credit policy and underwriting	Moderate	Acceptable	Moderate	Stable	
Disbursement/funding approvals	Moderate	Acceptable	Moderate	Stable	
Portfolio monitoring collections	Moderate	Strong	Moderate	Stable	
Cash and program reconciliation	Moderate	Acceptable	Moderate	Stable	
Member/borrower training	Low	Acceptable	Low	Stable	
<b>INDIVIDUAL LENDING:</b>					
Credit policy and underwriting	High	Acceptable	High	Decreasing	
Disbursement authorizations	Moderate	Strong	Moderate	Stable	
Portfolio monitoring, collections	Moderate	Weak	High	Stable	
Cash and program reconciliation	Low	Acceptable	Low	Stable	
Loss reserve policies, procedures	Moderate	Acceptable	Moderate		
<b>SAVINGS</b>					
Deposit & withdrawal policies	Moderate	Acceptable	Moderate	Stable	
Reporting and record keeping	Moderate	Weak	Moderate	Stable	
Liquidity and branch funding	High	Strong	Moderate	Stable	
Cash and program reconciliation	Low	Acceptable	Low	Stable	
<b>TREASURY &amp; FUND MGMT</b>					
Investment portfolio/ int. rate sensitivity	High	Acceptable	Moderate	Increasing	
Liquidity (cash for operations)	Moderate	Acceptable	Moderate	Stable	
Asset and liability mgmt. (matching)	High	Strong	Moderate	Stable	
Loss Reserves	Low	Acceptable	Low	Stable	

## **Step 2 - Develop strategies to measure risk**

During the risk assessment process significant controllable business risks will be identified that may be unacceptable at their present level. Steps must be taken either to evaluate business risk controls already in place or design and implement cost-effective processes to reduce the risks to an acceptable level.

Some strategies include market surveys, impact analysis, SWOT, performance indicators, variance and budget comparisons, etc.

Some Performance Indicators include:

Portfolio Quality - Repayment Rate, Arrears Rate, Portfolio At Risk, and Loan Loss Ratio  
Productivity – Staff to portfolio ratio, credit officer to borrower, cost per dollar lent  
Financial viability  
Profitability  
Leverage and capital adequacy  
Growth

## **Step 3 - Design operational policies and procedures to mitigate risk**

Board of Directors develops policies. The Board reviews and approves policies on annual basis (unless an event prompts a more frequent review). Board should ask whether any adjustments are needed or if management recommends any changes. These policies set the tolerable range of risk within which management should operate. Management develops the guidelines and procedures to implement policies for the day to day activities.

The Board is also responsible for monitoring the risks and ensuring that management is enforcing the policies they approved.

It is important before the guidelines and procedures become effective that the MFI evaluates the cost and benefit of each strategy (what cost of strategy versus what is the cost if no action is taken? Compare results and a decision can be made.). It is important to set a range of acceptance for each strategy in order to allow some flexibility for staff to work effectively.

It is important to distinguish reasonable risk from risk avoidance or elimination. Too much emphasis on risk avoidance can translate into incentives for staff to avoid poorer borrowers and weaken the mission of the MFI. Many MFIs design a set of controls and indicators that allows them to monitor the outcomes of their policies on borrower composition and target customer base.

## SAMPLE POLICIES THAT ADDRESS RISK IN MFIs

<b>Risk Category</b>	<b>Policies By The Board</b>	<b>Management Responsibility</b>
Credit Policies	<ul style="list-style-type: none"> <li>➤ Permitted lending activities</li> <li>➤ Portfolio diversification (e.g. % of capital to one product, maximum exposure to any borrower, etc.)</li> <li>➤ Reserve requirements and reserve ratios</li> </ul>	<ul style="list-style-type: none"> <li>➤ Detailed underwriting guidelines or procedures</li> <li>➤ Portfolio monitoring and reporting on asset quality</li> <li>➤ Operational procedures designed to mitigate transaction and credit risk</li> </ul>
Investment Policies	<ul style="list-style-type: none"> <li>➤ % in cash or cash-equivalents</li> <li>➤ Risk parameters for portfolio (e.g. % in treasury bills, equities, bonds, credit risk of individual instruments)</li> <li>➤ Maximum currency exposures</li> <li>➤ Maximum asset and liability mismatch (usually as % of capital)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Investment management guidelines and procedures</li> <li>➤ Test the portfolio's sensitivity to interest rate changes</li> <li>➤ Balance risk of loss of principal with income</li> </ul>
Liquidity Policies	<ul style="list-style-type: none"> <li>➤ Minimum cash reserves equal to a certain percentage of deposits (for client cash withdrawals)</li> <li>➤ Maintain cash balances or lines of credit equal to cover new loan demand and potential cash losses from delinquency</li> <li>➤ Maintain operating reserves equal to 2-3 months operating expenses</li> </ul>	<ul style="list-style-type: none"> <li>➤ Choose how cash management will be centralized or decentralized among branch offices;</li> <li>➤ Choose short-term investment instruments (treasury bills, staggering terms, etc)</li> </ul>
Capital Adequacy	<ul style="list-style-type: none"> <li>➤ Capital allocation to support risk of different business activities</li> <li>➤ Minimum capital adequacy ratio (sufficient cushion if the loss occurs)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Monitor whether changes in risk merit higher or lower capital allocations.</li> </ul>
Governance	<ul style="list-style-type: none"> <li>➤ BOD conducts performance assessment on Executive Director</li> <li>➤ BOD chooses External Auditor</li> </ul>	<p>Executive Director supervises performance assessment of MFI</p> <p>Executive Director and CFO assist and coordinates activities of External Auditors</p>

### Array of Options to Managers

<b>ACCEPT</b>	
No Plans	No Actions
<b>AVOID – Reduce level of risky activities and/or increase precautions</b>	
Divest Prohibit Target	Stop Screen Eliminate
<b>Offsetting – Loss Financing</b>	
Accept/ Retain Reprice Self Insure	Plan
<b>REDUCE</b>	
Disperse	Control
<b>TRANSFER</b>	
Insure Reinsure Indemnity	Share Outsource
<b>EXPLOIT</b>	
Allocate Diversify Expand Create	Reorganize/ Redesign Price Renegotiate Influence

Certain risks one needs to develop risk triggers. Triggers are like thunder, they are precursors to a risk event. For example a trigger for a MFI would be PAR or Resignation Rate. Others can be seen in attitudes, body language, participation, unsaid issues, absenteeism, etc.

Managers will need to develop a risk plan. This basically describes what to do to avoid and what to do if the risk presents itself. It could also mean what to do to take advantage of a risk. Please note that not all risks need a plan. Some risks have low probability or low impact. It all depends on schedule, budget, resources, deliverables, quality, performance, etc and the MFI risk tolerance. For an example of a risk plan, please see the following template:

#### **Step 4 - Implement into operations and assign responsibility**

Establish accountability at all levels of the organization for continuously aligning process objectives, goals and performances measures with business strategies and improving business risk controls. An organization can do this by talking with staff and ensuring they understand and are committed to the process. In addition, talk with clients to ensure their reactions to proposed guidelines and procedures are okay. Finally, assign specific personnel to monitor and accept responsibility for success of efforts.

BOD level deals with the strategic direction issues. Management level manages the day to day activities and promotes risk management strategy throughout MFI on a regular basis. Individual level understands accountability, complies with policies and procedures and reports on issues and/or new risks identified.

## **Step 5 - Test effectiveness and evaluate the results**

Management must regularly check the operating results to ensure that risk management strategies are indeed minimizing the risks desired. The MFI evaluates whether the operational systems are working appropriately and having the intended outcomes. The MFI assesses whether it is managing in the most efficient and cost effective manner.

Good management reporting is essential to understanding whether these controls are effective. Trend and ratio reporting is the most efficient way for directors and senior managers to absorb large amounts of information quickly. Following trends allows the institution to manage by exception. Managers can scan the trends in key ratios and focus negative or significant changes.

- **Branch and Area Managers** – need detailed and timely reports on specific numbers
- **Senior Managers** – need summary reports that capture trends in key ratios and indicators so they can monitor organization’s overall performance.
- **Senior Management and BOD** – reports should focus on financial and strategic risks. Summary reports should emphasize ratios on a monthly or quarterly trend basis. Review should focus on changes or trends that raise any concern over financial condition, projected performance and/or whether management has adequate resources and plans.

The organization must link the internal audit function to the risk management strategy. IA should evaluate operations “ex post” and helps assess whether procedures and controls are effective in mitigating risk.

The MIS needs to produce timely management reports and deliver them to specific personnel for proper monitoring and evaluation. The reports should measure the performance of risk control in reducing identified risks to an acceptable level.

## **Step 6 - Revise policies and procedures as necessary**

Internal audit and MIS should provide their reports to the Board of Directors and/or senior management (if applicable) for them to decide if changes need to be made. Board will then make their decision and instruct appropriate personnel to make the necessary changes.

Helpful hints in implementing strategy

- Lead the risk management process from the top
- Incorporate risk management into the process and systems design
- Keep it simple and easy to understand
- Involve all levels of staff