

Risk Management

Principles & Guidelines

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Why talk about risk?

Risk is something that we all face every day.

As a company, we have to take risks in pursuit of our commercial objectives.

To raise awareness that we all have to manage risk as part of our daily working lives as well as personal.

What do we know about RM?

RM is part of our every day lives:

- | | |
|-----------------------|------------------------------|
| Crossing the road | - Risk of getting run-over |
| Managing our finances | – Risk of going broke |
| Purchase of insurance | – Risk of fire, theft, storm |
| Choosing to smoke | – Risk of cancer |
| Going for a swim | – Risk of drowning |

The choices we make in choosing to accept these risks is part of who we are

Perception of risk – Simple Example

Which method of transportation has the greatest fatality rate?

By Boat

By Air

By Road – Car

By Road – Motorbike

Walking

Cycling

Train

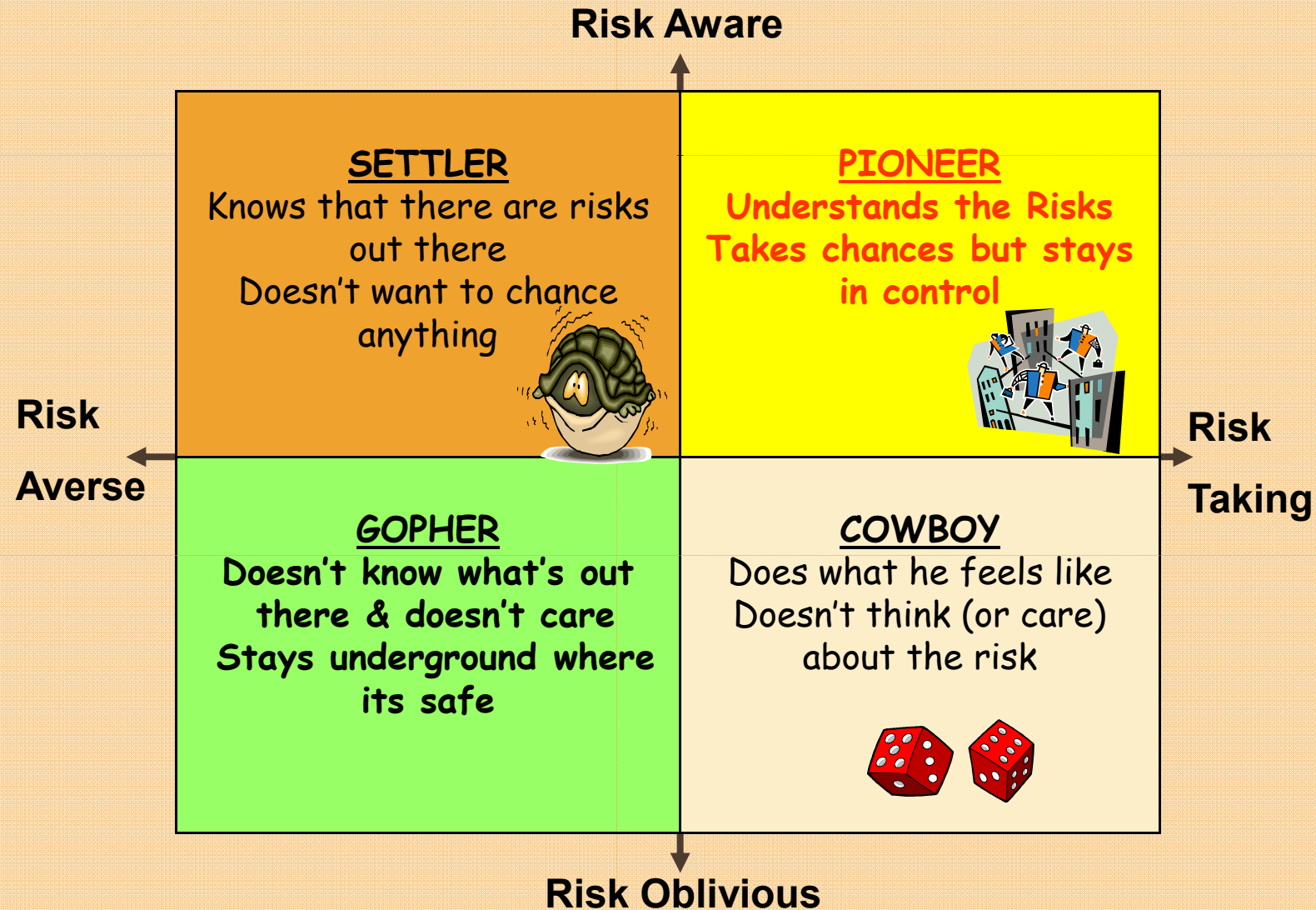
Research results

By Boat	5th	
By Air		7th
By Road – Car	4th	
By Road – Motorbike	1st	
Walking	2nd	
Cycling		3rd
Train		6th



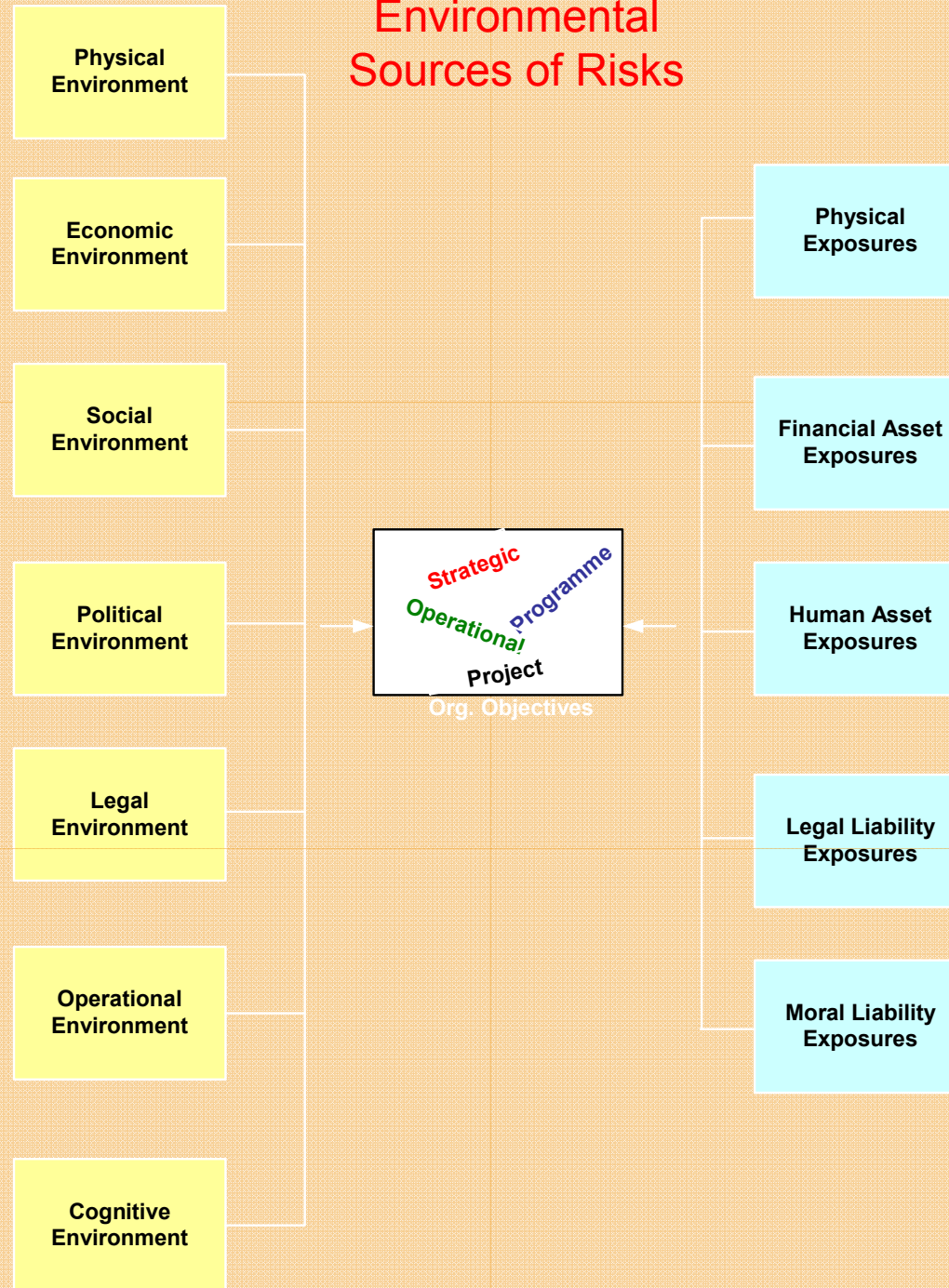
**Our perceptions
usually determine
our
view of the level of risk posed
by an activity**

Attitude to Risk

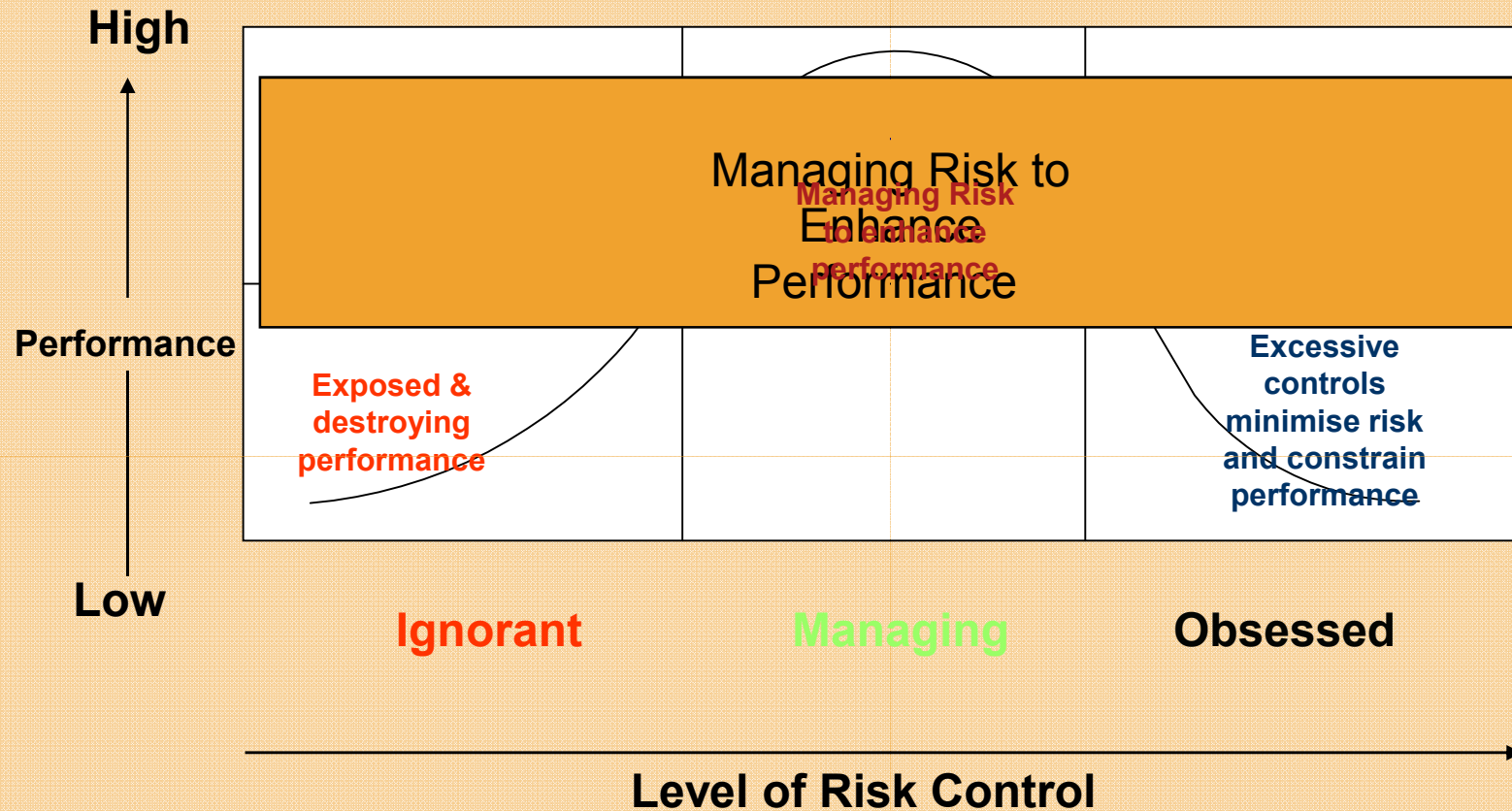


Sources of Business Risk

Environmental Sources of Risks



The Effect of Risk control on Performance



What is Risk Management?



Definition of Risk Management

ISO / IRM:

Coordinated activities to direct and control an organisation with regards to risk. It generally includes risk:

*assessment,
treatment,
acceptance &
Communication.*

Contained in ISO 31,000:2009(E)

RM definition contd...

A process whereby organisations methodologically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities.



Benefits of Implementing the International RM Standards

- Increase likelihood of achieving objectives

- Encourage proactive management

- Improve awareness of need to identify and treat risk throughout the organisation

- Improve the identification of opportunities and threats

- Comply with legal and regulatory requirement and international norms

- Improve mandatory and voluntary reporting

Benefits contd...

Improve governance

Improve stakeholder confidence and trust

Establish a reliable basis for decision making and planning

Improve control

Effectively allocate and use resources for risk treatment

Improve operational effectiveness and efficiency

Enhance health and safety performance, as well as environmental protection

Benefits contd...

Improve loss prevention and incident management

Minimize losses

Improve organisational learning

Improve organizational resilience

International Standard Principles

Creates value

Integral part of organisational processes

Part of decision making

Explicitly addresses uncertainty

Systematic, structured and timely

Based on the best available information

Tailored

Takes human and cultural factors into account

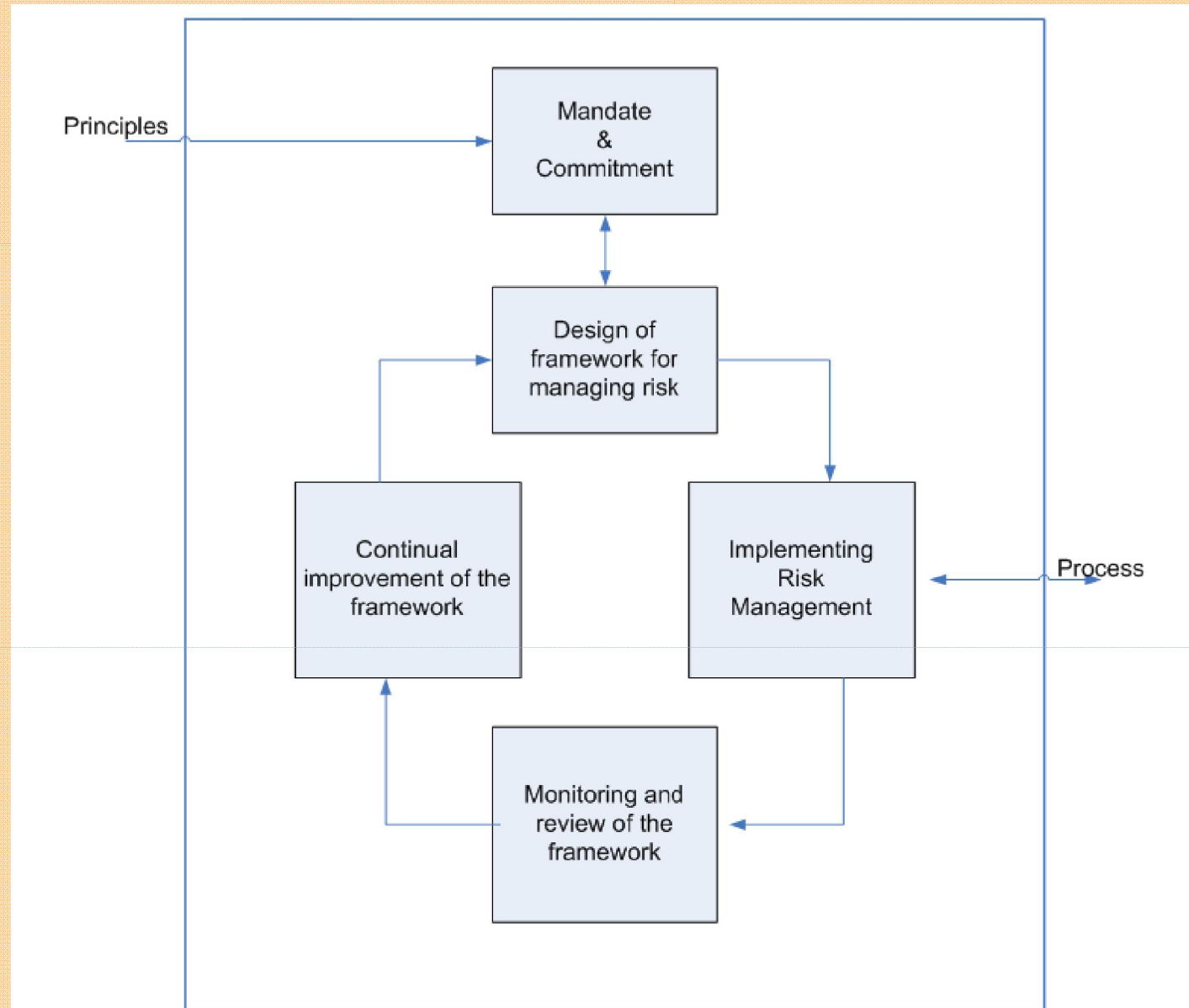
Principles contd...

Transparent and inclusive

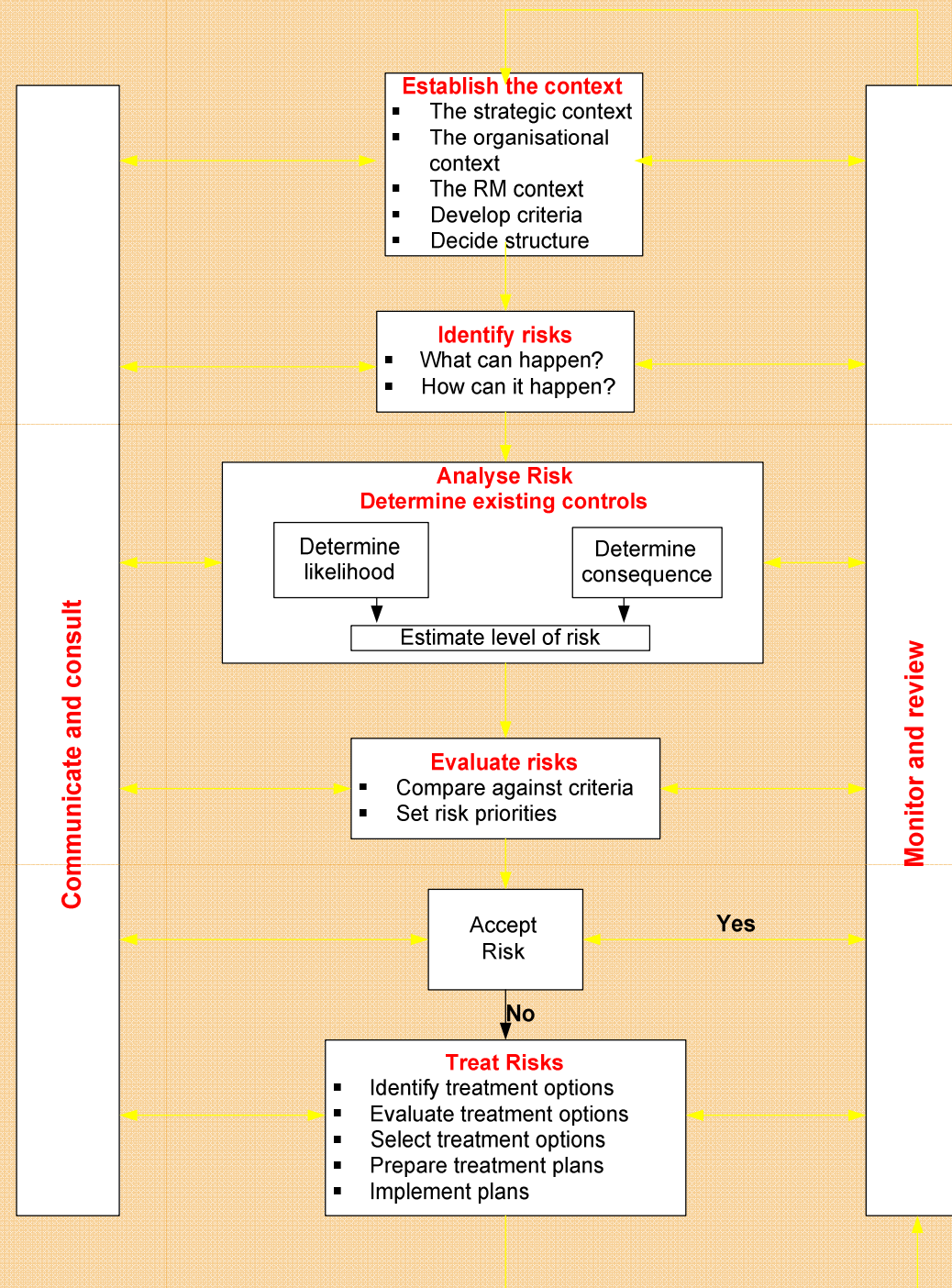
Dynamic, iterative and responsive to change

Facilitates continual improvement and enhancement of the organisation

RMI Framework



2. Establish the risk assessment process



Risk Identification

Identify an organisation's exposure to uncertainty

Widely used approach is to break the risks down into categories:

Strategic/commercial risks

Economic/financial/market risks

Legal, contractual and regulatory risks

Organisational management/human factor

Political/societal factors

Environmental factors/Acts of God

Technical/ operational/infrastructural risks

Methods of Identifying Events

Facilitated workshop

Interviews

Targeted questionnaire

Process flow analysis

Leading Event Indicator and Escalation Trigger

Loss event data tracking

Risk Analysis

Risk analysis is concerned with the probability and impact of individual risks, taking into account any interdependence.

Probability is the evaluated likelihood of a an event actually happening, including consideration of frequency of occurrence

Impact is the evaluated effect or result of a particular risk actually happening

Example of Risk Probability Framework

Probability	Criteria
Very low	0-5% (extremely unlikely, or virtually impossible)
Low	6-20% (low but not impossible)
Medium	21-50% (Fairly likely to occur)
High	51-80%(more likely to occur than not)
Very high	>80%(almost certain to occur)

Example of Impact Framework

Cost Impact	
Very low	\$0 to \$100,000
Low	>\$100,000 to <\$500,000
Medium	>\$500,000 to <\$1,000,000
High	>\$1,000,000 to < \$5,000,000
Very high	>\$5,000,000

Impact Contd...

Budgetary Impact	
Very low	0 to 3%: Negligible effect on projected cost
Low	3 to 10%: Small increase
Medium	10 to 30%: Significant increase
High	30 to 75%: Large increase
Very high	>75% Major increase

XXX Ltd. Risk Management Value Chain

Identify Key Business
Objectives
(1)

Identify Key
Processes;
Dependencies and
Enablers (2)

Identify key Threats
and Indicators
(3)

Identify likelihood and
Severity/impact of
Occurrence of Threat
(4)

Assess
Countermeasures
(5)

Develop Action Plan
(6)

Business Objectives Identified:

The management of XXX Ltd. production Inventory outlined their primary objective as the ability to efficiently meet the production demand for raw materials. However, to achieve this goal, the following sub-objectives / enablers would have to be met:

1. Proper Material Requirement Planning (MRP) and forecasting.
2. Efficient execution of the Purchasing Plan.
3. Proper receipt, storage and maintenance of stores.
4. Proper issue procedure.
5. Proper accounting for perpetual inventory.

Risk Ranking Table

The following is used to assign impact, probability and urgency weights to identified risks / issues.

What will be the IMPACT on the ability to achieve the object?				
1	5	15	30	50
Negligible	Small	Noticeable	Significant	Major
LIKELIHOOD (A): - If it is not occurring, how likely is it to occur?				
1	2	4	6	10
Unlikely to Occur	Likely to occur rarely	Likely to occur	Highly likely to occur	Certain to occur
LIKELIHOOD (B): - If event is already occurring, how often does it occur?				
1	2	4	6	10
Rarely	Occasionally	Frequently	Daily	Continuously
URGENCY (A): - How soon is action required to prevent impact?				
1	2	4	6	10
1 year	6 months	1 quarter	1 month	1 week
URGENCY (B): - How soon is action required to mitigate impact?				
1	2	4	6	10
Year	6 months	1 quarter	1 month	Immediately

Production Inventory: Proper accounting for perpetual inventory (FIFO & Expiration)

Enablers	Threats	Countermeasure In Place	Is threat occurring		Probability & frequency rating		Recommended Countermeasure
			Yes	No	Prob	Freq	
Efficient inventory computer based management system	System failure due to crash, virus or physical destruction of hardware	Information contained on system is backed-up on a routine basis and storage is done off-site		X	L		Existing countermeasure is adequate
Accurate input information	Staff mistakes and negligence resulting in inaccurate physical stock checks	Management's supervision and vigilance	X			L	Conduct stock counts with a minimum of two independent counters. With the assistance of the IAD, establish documented counting procedure and train staff accordingly.
	Improper operation of the system due to incompetence of staff	Recruitment of qualified individuals and training of staff		X	L		Existing countermeasure is adequate
	Inaccurate supplier information	Verification procedure for incoming stores	X			L	Existing countermeasure is adequate
Frequent physical stock count	Poor planning and management	Stock count scheduled and verified by Internal Audit Department		X	L		Existing countermeasure is adequate
Efficient internal control system at all stages of management	Poor supervision and management	Performance evaluation system as well as the productivity incentive system	X			L	Sanction must be brought against management's and supervisor's negligence
	Lack of documentation of accepted procedures	All procedures documented under ISO		X	L		Existing countermeasure is adequate

Production Inventory: Assessment and ranking of threats facing the enablers of objective #4

Srl	Risk	ALE	Impact	Likelihood	Urgency	Score	Rank	Remark
01	System failure due to crash, virus or physical destruction of hardware		5	2	1	10	6th	
02	Staff mistakes and negligence resulting in inaccurate physical stock checks		5	6	6	180	2nd	
	Improper operation of the system due to incompetence of staff		5	6	6	180	2nd	
	Inaccurate supplier information		5	4	2	40	5th	
03	Poor planning and management		30	2	1	60	4th	
04	Poor supervision and management		15	4	4	240	1st	
	Lack of documentation of accepted procedures		5	4	4	80	3rd	

Risk Treatment

Can involve:

- Avoiding the risk – not to start or continue an activity
- taking or increasing risk in order to pursue an opportunity
- removing the risk source
- Changing the likelihood
- Changing the consequences
- Transferring the risk or sharing with another party
- Retaining the risk by informed decision

Monitor performance and modify
as needed



Summary

All entities exist to provide value for it's stakeholders

Uncertainty presents risks and opportunities – with potential to erode / enhance value

All entities face uncertainty – management's challenge “balance the risk and opportunities”

RM provides management with a framework to effectively deal with uncertainty – the associated risks and opportunities – and enhance their capability to build value.

“Organisations make and save money by taking risks and lose money by not effectively managing risk”

Thank you!!