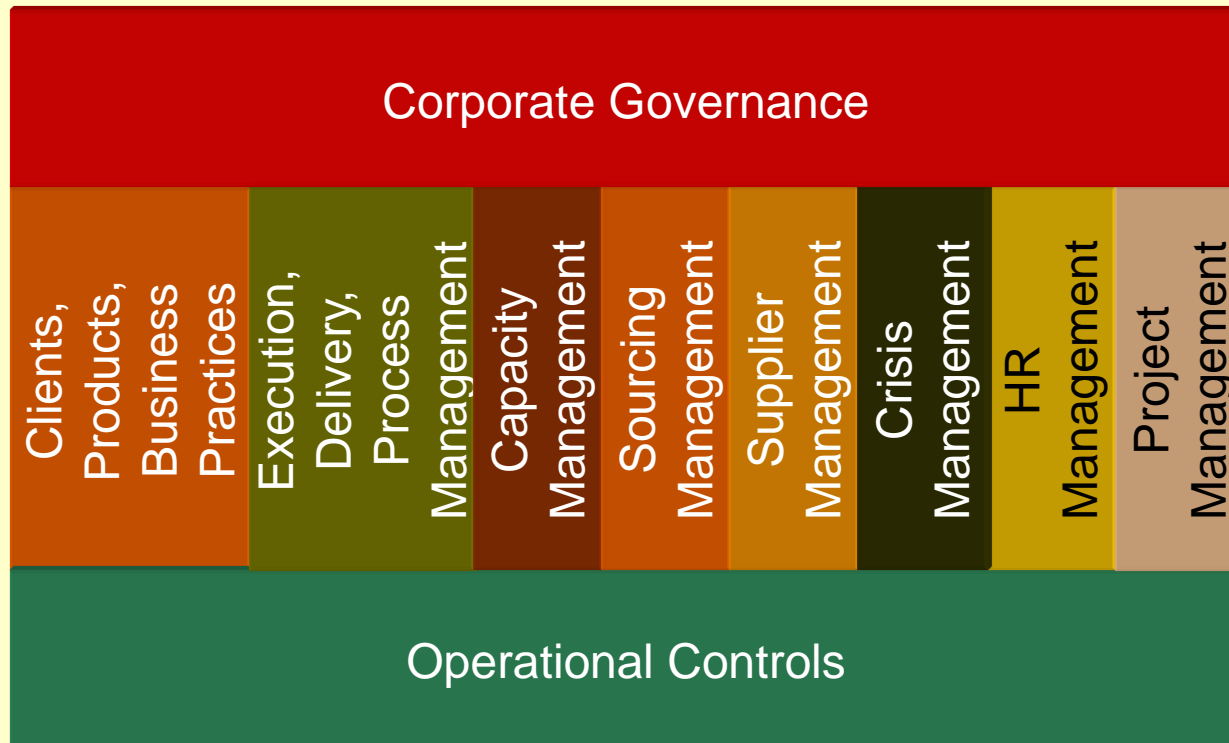


# Operational Risk in a Manufacturing Environment

- Navizone Limited

# Components of Operational Risk Management in a Manufacturing Environment



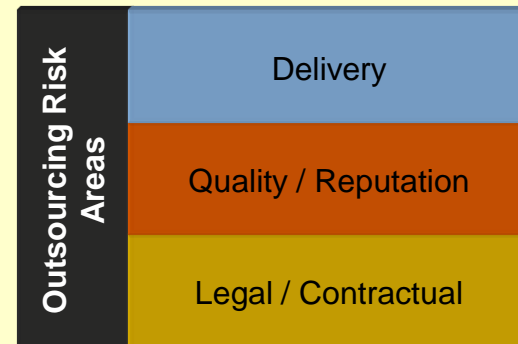
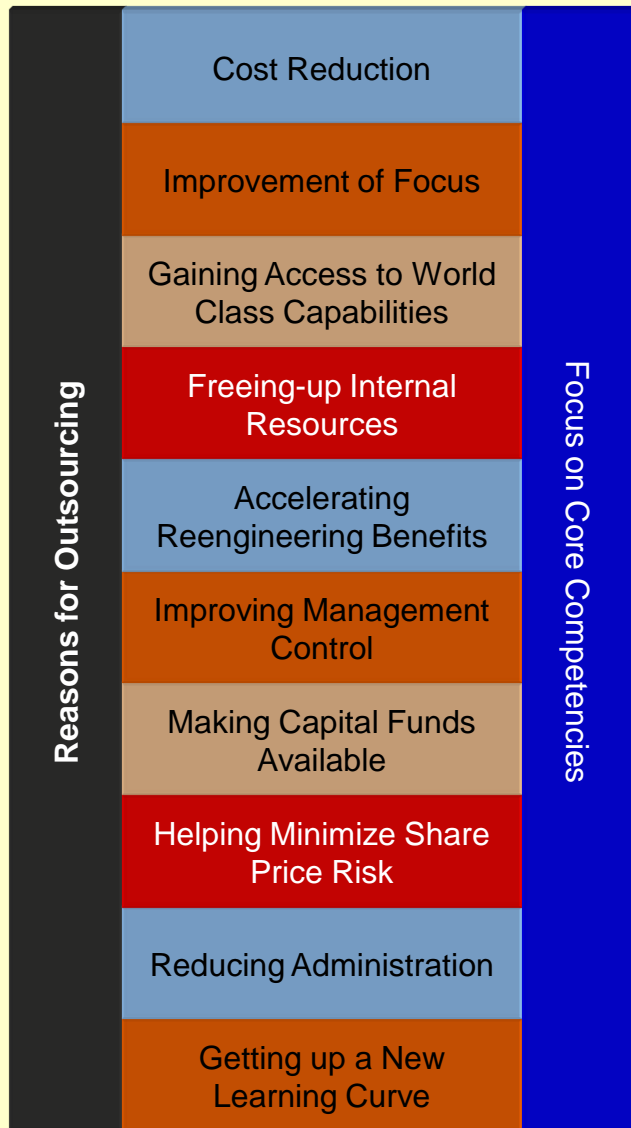
# Capacity Management

- Need to estimate future capacity in the context of a dynamic market environment
- Needs to deal with fluctuating demand
- Effective process should be designed so that:
  - The correct level of internal & external resources are available to support business needs
  - Risks associated with operating business processes are managed at an acceptable level
  - Resources are optimized so that business objectives are met with minimal cost
  - An appropriate level of consistency, reliability and predictability is designed into operations
  - Changes can be implemented without adversely affecting ongoing operations

# Capacity Management – Operational Resilience

- Need to link Capacity Management and Operational Resilience
- Need to operate at as full a capacity as possible without causing business disruption
- The integration of Sales & Marketing strategy development with Capacity Management techniques is vital
- Additional capacity factors:
  - Demand
  - Operations
  - Materials
  - Finance
  - HR
  - Marketing

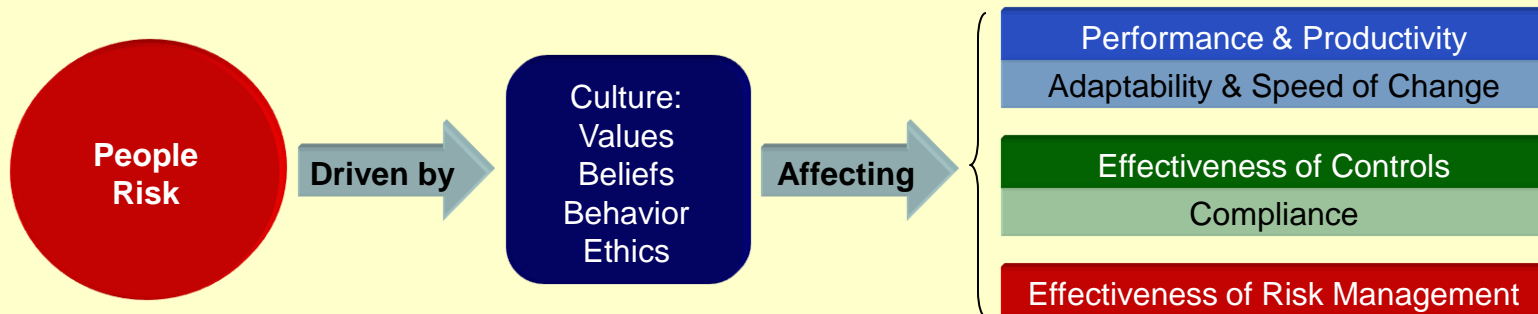
# Sourcing Management



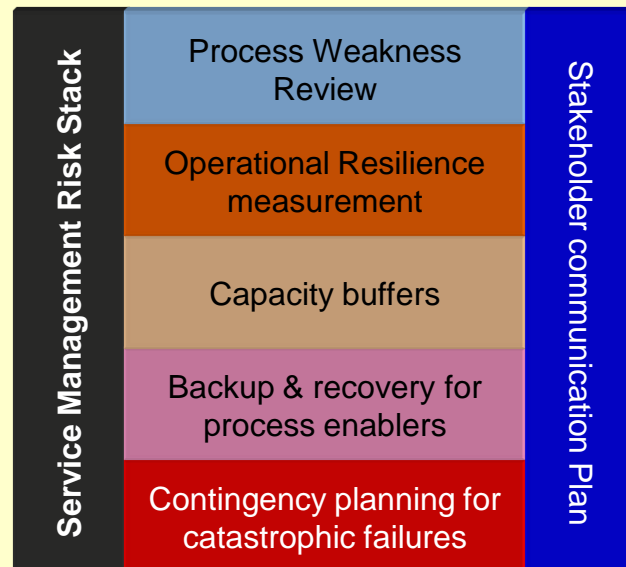
# Supplier Management

- It is easy to become dependent on your top 10 suppliers
  - Suppliers by volume
  - Unique suppliers
- What fallback is there if something goes wrong?
- Supply chain costs can be saved or lost through supplier relationships
  - Electronic affiliation
  - Inventory holding and planning
  - Cross training
- Are Supply chain Opportunities and Risks from Suppliers identified and monitored?

# HR Management

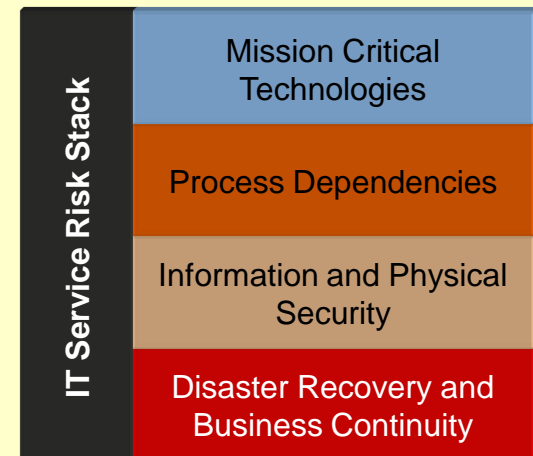


# Service Management - Introduction

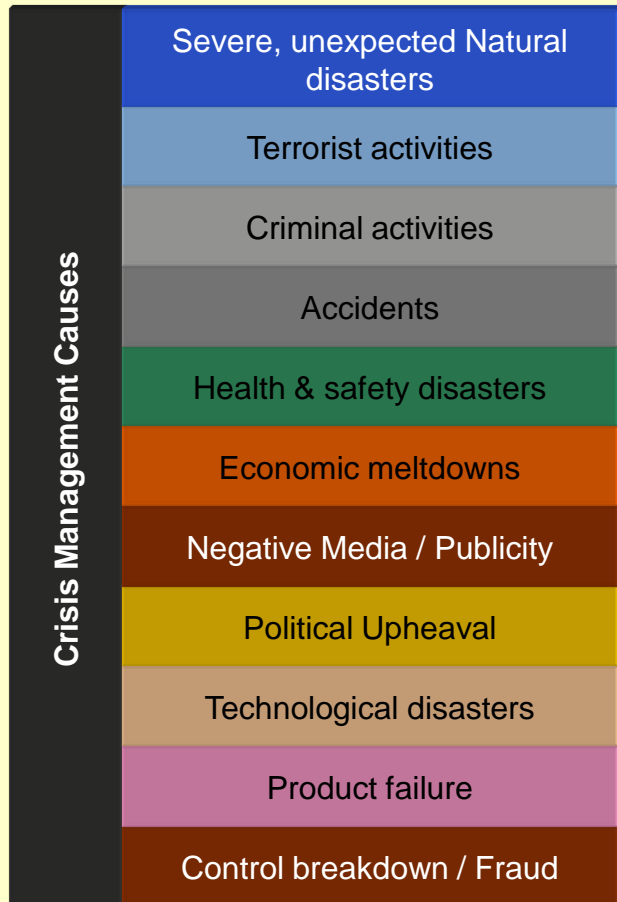


# Service Management – Information Technology

- Major Risks:
  - Mission critical technologies
    - Networks
    - Databases
    - Applications
  - Process dependencies
    - Applications
    - Communications
    - Other
  - Information security
  - Disaster recovery – Business continuity



# Crisis Management



Crisis Management should not be confused with Disaster Recovery

Crisis Management is much more dependent on the right cultural factors being in place before a disaster strikes

A Crisis can bring an organization to a halt, throwing short term business survival into doubt

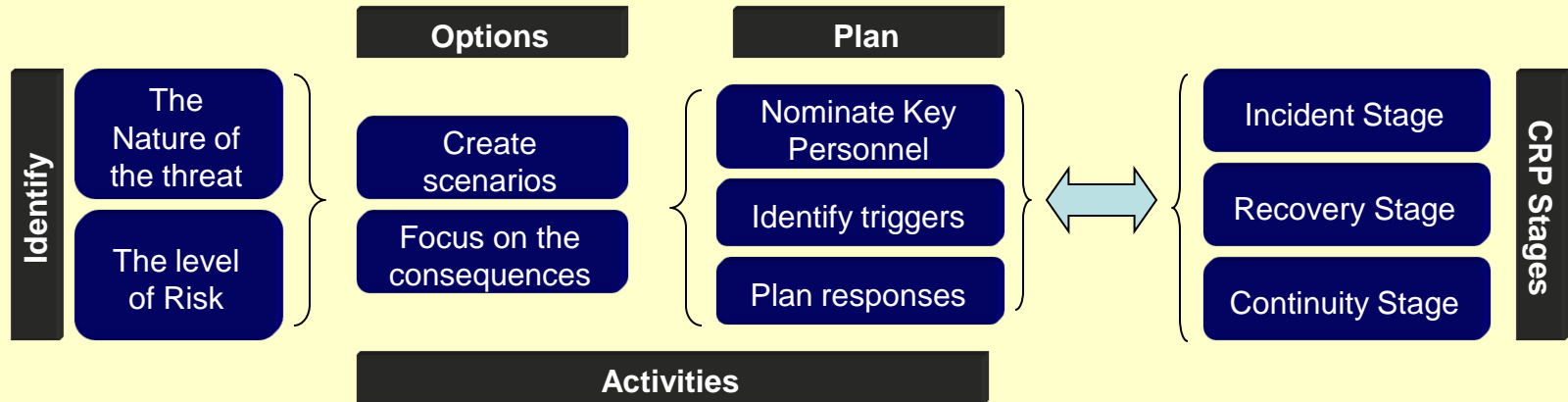
A Crisis leads to a significant diversion of resources into areas other than normal business operations

Tangible and Intangible assets are at risk. Tangible losses usually occur first. Management needs to protect intangibles

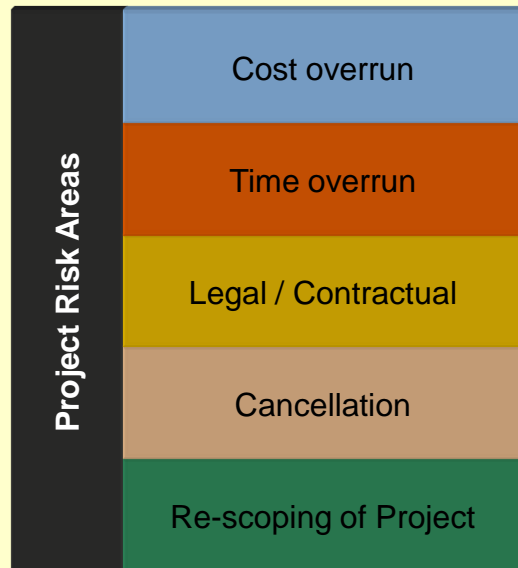
The business needs to be re-normalized via Impact Recovery Management

80% of companies that do not have a workable crisis management plan will fail within 1 year of a major disaster

# Crisis Management



# Project Risk Management



Mainly driven by People issues

# Strategic Advantage

- Boards need to focus on managing risk for strategic advantage
- Not enough attention is given to taking an enterprise-wide view of operational risk so it remains apart from strategic considerations
- Need to obtain competitive advantage by aligning risk management with forward-looking growth strategies

# Operational Risk Program Requirements

- Define scope
- Define roles, responsibilities and reporting
- Identify and prioritize categories of risk
- Map categories against business processes
- Assign ownership
- Identify and implement controls
- Implement measures, methods and tools

# Consequences Of Failure To Manage Risk

- Direct Financial loss for failing to meet an obligation (penalties, restitution, etc)
- Direct Financial loss from loss of income (sales, fees, commissions etc).
- Statutory or regulatory penalties from censure to revocation of licenses
- Opportunity costs from adverse publicity, being unable to trade, inability to deliver, poor product or service quality.

# Operational Risk Profile

- An Operational Risk Profile is an integrated picture of Operational Risks based on all major sources:
  - Compliance
  - Legal opinions
  - Operational Risk assessment
  - Project Risk assessments
  - Internal Audit reports
  - External Audit reports
  - Fraud reports
  - Incident reports
  - General loss analyses

# Reasons For Operational Risk Becoming An Issue

- Speed of change
- Globalization
- Internet / e-business
- Competition
- Increasing regulation
- Increased awareness of uninsurable risk
- Increased level of litigation
- Greater focus on Corporate accountability
- Higher public expectations

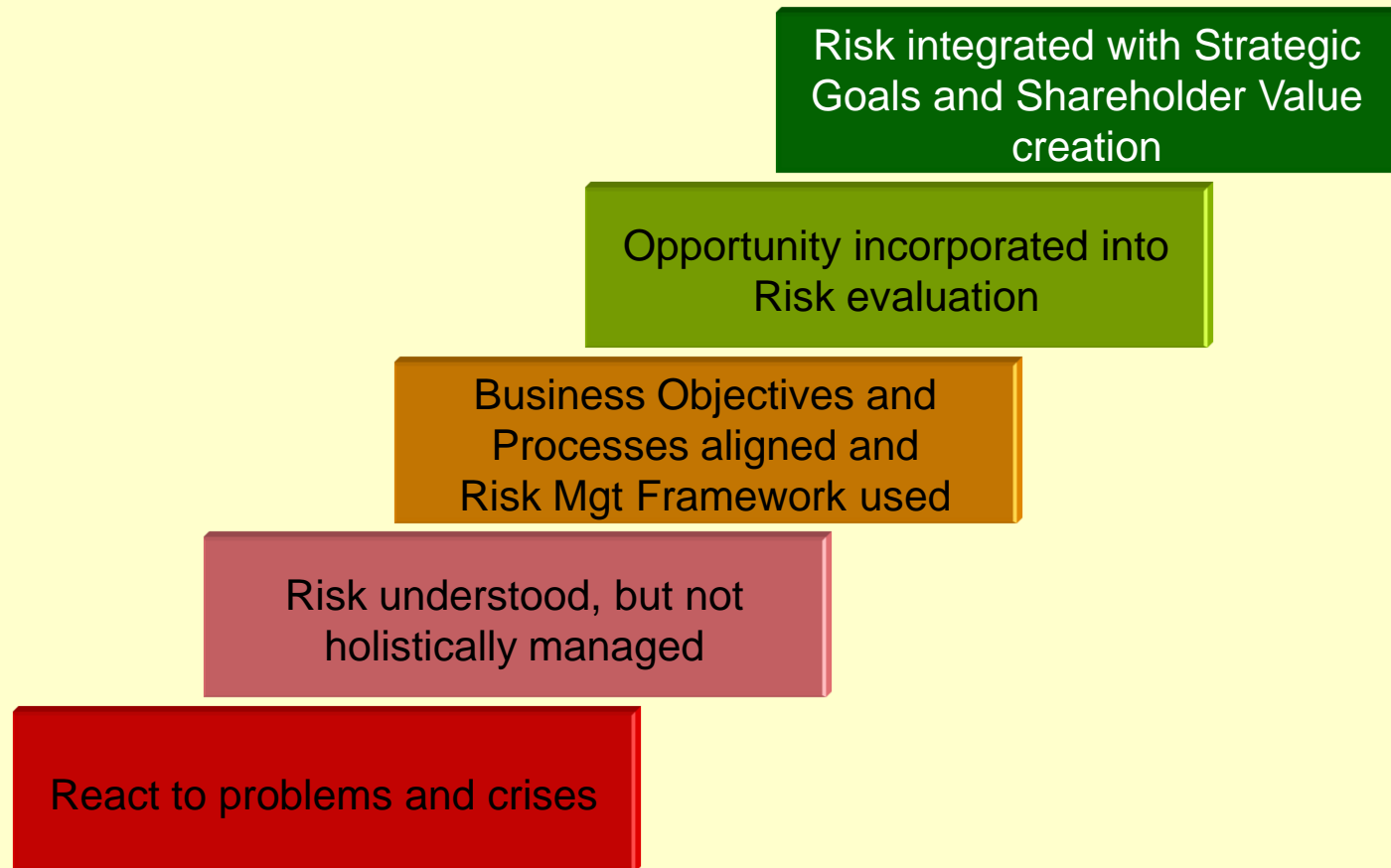
# Advantages of Enterprise Risk Programs

- Management sees Risk as an opportunity not as a threat
- It leverages competitive advantage by focusing management attention on Key Success Factors
- It improves Managements understanding of commercial operations
- It enhances shareholder value by reducing the adverse impact of downside risk and maximizing upside potential
- It gives management a clear view of the risks they are taking as well as avoiding

# Business Risk Profiling

	Compliance & Prevention	Operations - Driven	Strategy - Driven
Opportunity			Analyze Risk to Identify Opportunities
Uncertainty		Meeting Operational Targets	
Hazard	Contingency Planning		

# Risk Management Hierarchy



# Benefits of a Risk Management Framework

