

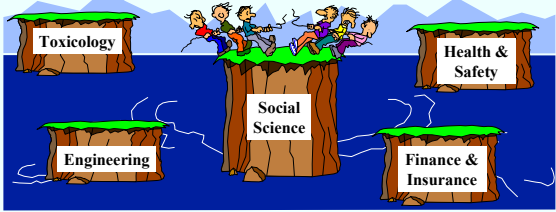
Introduction to the Management of Risk

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Overview

- Theories of risk
- Definition of risk
- Management of risk framework
 - analysis
 - management
 - monitoring
- Worked example

The Risk Archipelago



Why Manage Risk?


- **Because Things Go Wrong!**
- ‘Natural’ Disasters
- Human Behaviour
- Socio-Technical Disasters
- **PROJECT MANAGEMENT**

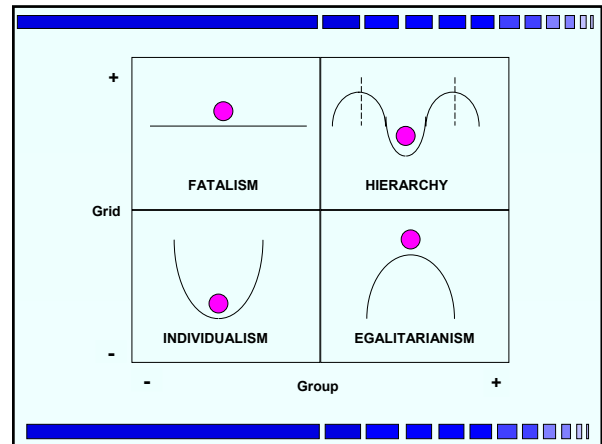
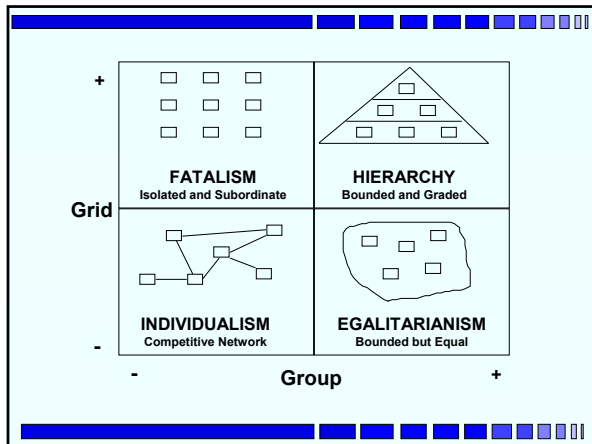
The Concept of Risk

- Chance in Gambling
- Gains versus Losses
- Danger from Technology
- Dangerousness from People
- Accountability and Blame
- A Question of Perception



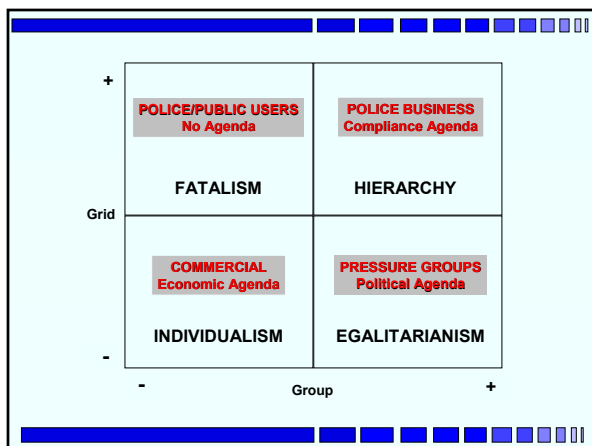
	It Scares Me	MEDIUM RISK	HIGH RISK
	It's No Problem	LOW RISK	MEDIUM RISK
		I Often Fly	I Rarely Fly



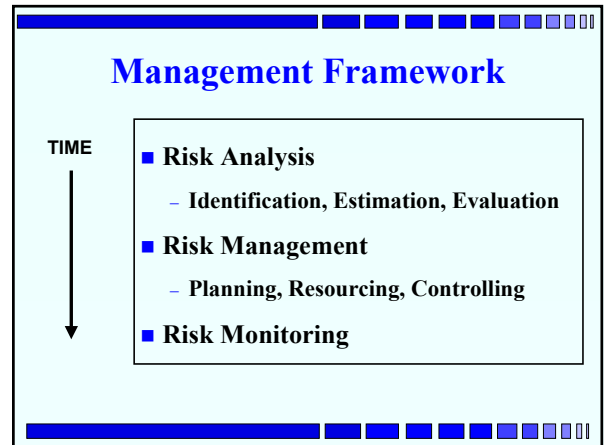
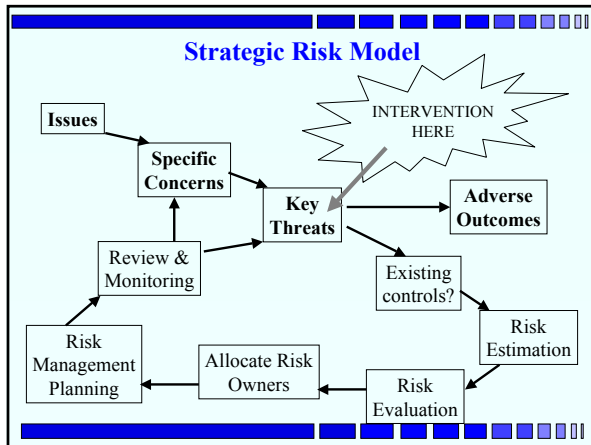
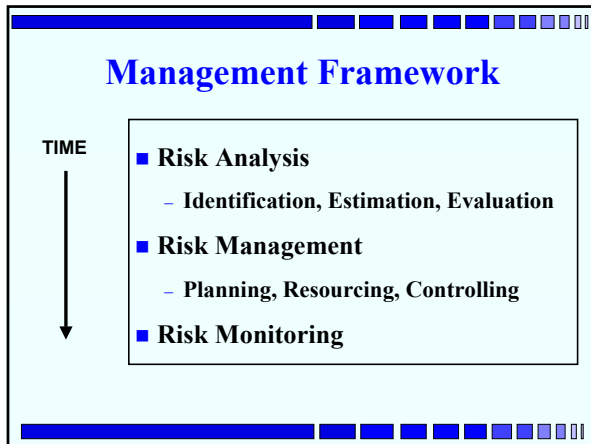


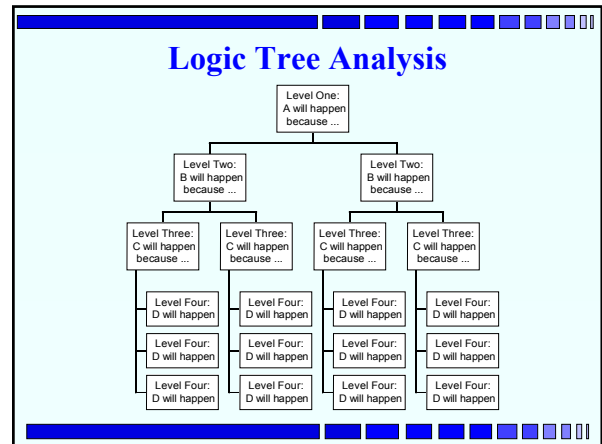
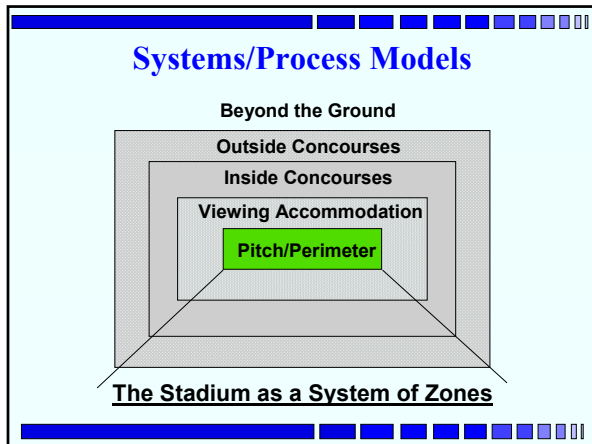
- ### Cars, Cholera and Cows
- Directly perceptible risks
 - voluntary and involuntary
 - Risks perceived through science
 - voluntary and involuntary
 - Virtual risks
 - products of the imagination

- ### Stakeholder Perceptions
- Those who commissioned the work
 - Those who are working on the project
 - Those who will use the end product
 - Those with concerns about the project
 - Those who have a commercial interest



- ### “The Chance of Exposure to the Adverse Consequences of Future Events”
- the future event which may occur
 - the probability of the event occurring
 - the adverse consequences if it does





- ## Risk Estimation
- 0 None
 - 1 Low
 - 2 Low/Medium
 - 3 Medium/High
 - 4 High

- ## Risk Estimation - Probability
- Score 1 - Very Unlikely
 - Score 2 - Unlikely
 - Score 3 - Possible
 - Score 4 - Probable
 - Score 5 - Very Probable

- ## Adverse Consequences - Projects
- the project fails completely
 - the timescales slip
 - the budget is overspent
 - the quality suffers

- ## Adverse Consequences - Events
- Financial losses/liabilities
 - Exposure to legal liabilities
 - Personal security being compromised
 - Health and safety being compromised
 - Reputation/credibility being damaged
 - The delegate experience undermined
 - Venue or local community disruption
 - Venue loss of profitability

Adverse Consequences - Stadia/Arenas

- for public safety and order
- for the profitability of the business
- for the enjoyment of spectators
- for the local community

Adverse Consequences – University Course

- delays
- cost over-runs
- quality failures
- financial liabilities
- financial losses
- legal liabilities
- student welfare
- student ‘experience’
- staff morale/retention
- staff health and safety
- complaints/grievances
- reputation/credibility
- ongoing business
 - Degree damaged
 - Institute damaged
 - University damaged
- Customer business

Risk Estimation - Consequences

- Score 1 - Minor
- Score 2 - Moderate
- Score 3 - Serious
- Score 4 - Severe
- Score 5 - Fatal

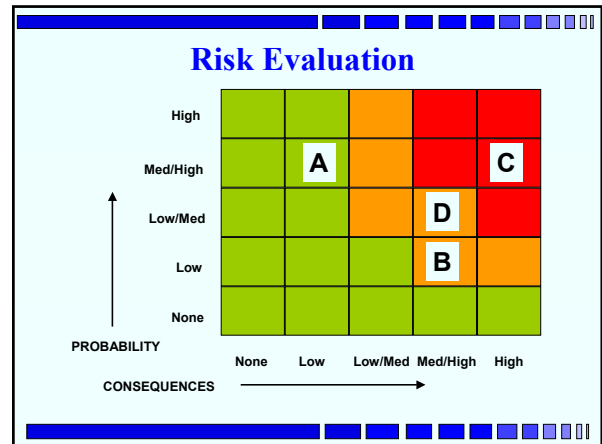
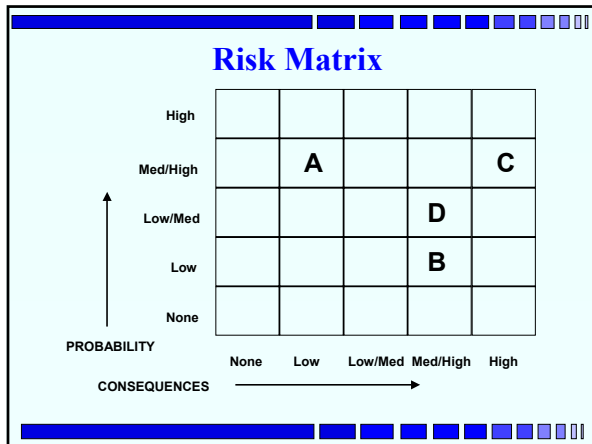
Score 1	Minor distress to an individual Financial losses of up to £10,000 Very minor disruption within the venue Minor loss of goodwill confined to the individual event
Score 2	Minor illness/injury Minor distress to more than one person Civil damages/criminal penalty of up to £10,000 Financial losses of £10,001 to £100,000 Minor disruption or protest within the venue Loss of goodwill but with no effects beyond the individual event
Score 3	Serious illness/injury/threat to life, restricted to an individual Substantial distress to one or more persons Civil damages/criminal penalty of £10,001 to £250,000/up to 10 years prison Financial losses of £100,001 to £1,000,000 Disruption or protest in the local community Damage to reputation/credibility extending beyond the individual event
Score 4	Serious illness/injury/threat to life, involving more than one person Financial losses above £1,000,000 Unlimited civil damages/criminal penalty or imprisonment in excess of ten years Disruption or protest with nationally felt effects Significant damage to reputation/credibility resulting in widespread adverse publicity
Score 5	Loss of life

Risk Evaluation

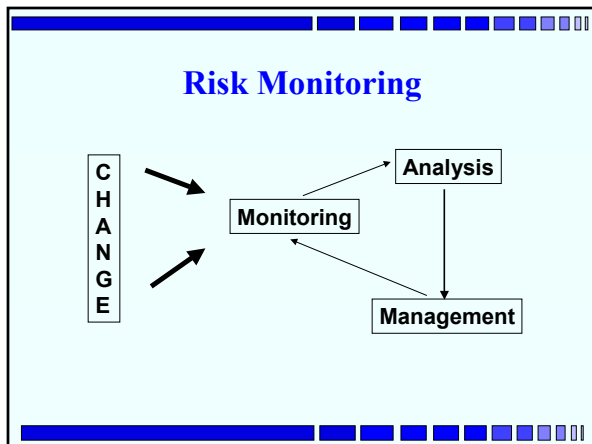
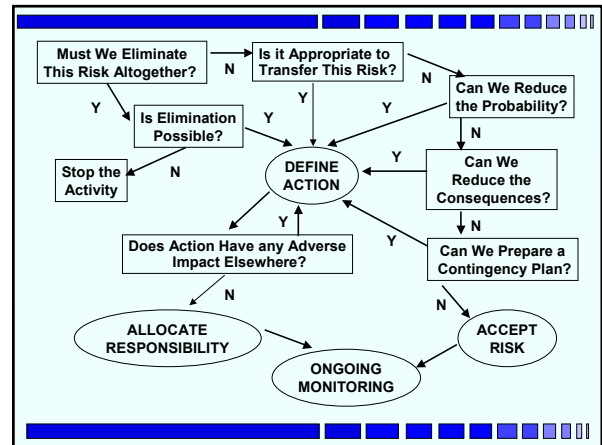
- Risk Criticality Matrices
- The ALARP Principle
- Market Mechanisms
- Cost Benefit Analysis
- Risk/Risk Comparisons
- Risk Compensation Theory
- Risk Perception Theory

Example Risk Assessment

- (A) The peace process will fail
Probability = 3; Consequences = 1
- (B) Patten will cease to be a Government priority
Probability = 1; Consequences = 3
- (C) Organisational culture will not support
Transparency
Probability = 3; Consequences = 4
- (D) Over-reliance on Internet technology for
external communication
Probability = 2; Consequences = 3



- ### Risk Management
- Elimination or Close Down?
 - Transfer?
 - Countermeasure?
 - Contingency Plan?
 - Accept Risk?
 - Responsibility?



- ### Summary
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