



مجموعة جامعة
الجميع للذكاء
للتعليم القابضة

MIDOCEAN
UNIVERSITY
BY EVERYONE'S SMART UNIVERSITY

Risk Management

MGM 510

Lecture 1

Prepared by
Dr. Hamed Almahadin

www.midocean.ae



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Chapter#1

Approaches to defining risk

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Intended Learning outcomes (ILOs)

Upon completion of this chapter each student will be able to:

- Produce a range of established definitions of risk and risk management and describe the usefulness of the various definitions;
- List the range of characteristics of a risk that need to be identified in order to provide a full risk description and justify the inclusion of each item;
- Summarize the options for the attachment of risks to various attributes of an organization and describe the advantages of each approach;
- Identify the features of the four types of risk that enable them to be identified as compliance, hazard, control and opportunity risks.

Topics to be covered in this chapter

- **Definitions of risk.**
- **Types of risks**
- **Risk description**
- **Risk triggers.**
- **Inherent level of risk**
- **Risk classification systems**
- **Risk management**
- **Benefits of Risk Management**

Definition of “ RISK “

- Risk is a chance or possibility of danger, loss, injury or other adverse consequences
- Risk is exposed to danger
- Risk is related to uncertainty of outcome
- Risk is the combination of the probability of an event and its consequence
- Risk is effect of uncertainty on objectives
- Risk is often described by an event, a change in circumstances, a consequence, or a combination of these and how they may affect the achievement of objectives.

Definition of “ RISK “

- Risk is the uncertainty of an event occurring that could have an impact on the achievement of objectives
- Risk is a combination of likelihood and magnitude
- Risk is anything that can impact the fulfilment of corporate objectives
- Risk is an unplanned event with unexpected consequences
- Risk is an event with the ability to impact (inhibit, enhance or cause doubt about) the effectiveness and efficiency of the core processes of an organization

Definition of “ RISK “

Organization	Definition of risk
ISO Guide 73 ISO 31000	Effect of uncertainty on objectives. Note that an effect may be positive, negative, or a deviation from the expected. Also, risk is often described by an event, a change in circumstances or a consequence.
Institute of Risk Management (IRM)	Risk is the combination of the probability of an event and its consequence. Consequences can range from positive to negative.
<i>Orange Book</i> from HM Treasury	Uncertainty of outcome, within a range of exposure, arising from a combination of the impact and the probability of potential events.
Institute of Internal Auditors	The uncertainty of an event occurring that could have an impact on the achievement of the objectives. Risk is measured in terms of consequences and likelihood.

Definition of “ RISK “

- Any possible/potential event could have either:
Positive consequence (opportunity)
Negative consequence (threats)
- Typically, we get more concerned about threats than opportunities.



Definition of “ RISK “

- Risks aren't **problems/Issues**.
- **Problems/Issues** are negative events that are in the process of occurring right now.
- Risks are potential/possible event that can materialize and then become problems.



Definitions of 'Risk'

'Effect of uncertainty on objectives' -

ISO 3100:2009 Risk Management – Principles and Guidelines

NOTE 1 – An effect is a deviation from the expected – positive and/or negative

NOTE 2 – Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).

Definitions of 'Risk'

'Effect of uncertainty on objectives' -

ISO 3100:2009 Risk Management – Principles and Guidelines

NOTE 3 – Risk is often characterized by reference to potential events and consequences, or a combination of these.

NOTE 4 – Risk is often expressed in terms of a combination of the consequences of an event (including change in circumstances) and the associated likelihood of occurrence.

NOTE 5 – Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence or likelihood.

Definitions of 'Risk'

*'A **hazard** is the potential for harm arising from an intrinsic property or disposition of something to cause detriment.'*

*'**Risk** is the chance, high or low, that somebody or something could be harmed by these and other hazards, together with an indication of how serious the harm could be.'*

Types of risks

- Risk may have positive or negative outcomes or may simply result in uncertainty.
- Therefore, risks may be considered to be related to an opportunity or a loss or the presence of uncertainty for an organization.
- Every risk has its own characteristics that require particular management or analysis.
- **Risks are divided into four categories:**
 - Compliance (or mandatory) risks;
 - Hazard (or pure) risks;
 - Control (or uncertainty) risks;
 - Opportunity (or speculative) risks.

Types of risks

- In general terms, organizations will seek to minimize compliance risks, mitigate hazard risks, manage control risks and embrace opportunity risks.
- It is, perhaps, more common to find risks described as two types, pure or speculative
- The most important issue is that an organization adopts the risk classification system that is most suitable for its own circumstances.

Types of risks-Hazard (or pure) risks

- There are certain risk events that can only result in negative outcomes.
- These risks are **hazard risks or pure risks**, and these may be thought of as **operational or insurable risks**.

Types of risks-Hazard (or pure) risks

- In general, organizations will have a tolerance of hazard risks, and these need to be managed within the levels that the organization can tolerate.
- A good example of a hazard risk faced by many organizations is “**Theft Risk**”.

Types of risks-Hazard (or pure) risks

- Hazard risks are associated with a source of potential harm or a situation with the potential to undermine objectives in a negative way.
- Hazard risk management is concerned with mitigating the potential impact.
- Hazard risks are the most common risks associated with operational risk management, including occupational health and safety programs.

Types of risks- Control (or uncertainty) risks

- There are other risks that give rise to uncertainty about the outcome of a situation.
- These can be described as control risks and are frequently associated with project management.
- In general, organizations will have an aversion to control risks.

Types of risks- Control (or uncertainty) risks

- Uncertainties can be associated with the benefits that the project produces, as well as uncertainty about the delivery of the project on time, within budget and to specification.
- The management of control risks will often be undertaken in order to ensure that the outcome from the business activities falls within the desired range.
- The purpose is to reduce the variance between anticipated outcomes and actual results.

Types of risks- Control (or uncertainty) risks

- Control risks are associated with unknown and unexpected events.
- They are sometimes referred to as uncertainty risks and they can be extremely difficult to quantify.
- Control risks are often associated with project management and the implementation of tactics.

Types of risks- Control (or uncertainty) risks

- In these circumstances, it is known that the events will occur, but the precise consequences of those events are difficult to predict and control.
- Therefore, the approach is based on managing the uncertainty about the potential impacts and consequences of these events

Types of risks- opportunity (or speculative) risks

- Organizations deliberately take risks, especially marketplace or commercial risks, in order to achieve a positive return.
- These can be considered as opportunity or speculative risks, and an organization will have a specific appetite for investment in such risks.
- Opportunity risks relate to the relationship between risk and return.

Types of risks- Opportunity (or speculative) risks

- The purpose is to take action that involves risk to achieve positive gains.
- The focus of opportunity risks will be towards investment.

Types of risks- Opportunity (or speculative) risks

- **There are two main aspects associated with opportunity risks:**
- There are risks/dangers associated with taking an opportunity, but there are also risks associated with not taking the opportunity.
- Opportunity risks may not be visible or physically apparent, and they are often financial in nature.

Types of risks- Opportunity (or speculative) risks

- Although opportunity risks are taken with the intention of obtaining a positive outcome, this is not guaranteed.
- Nevertheless, the overall approach is to embrace the opportunity and the associated opportunity risks.
- Opportunity risks for small businesses include moving a business to a new location, acquiring new property, expanding a business and diversifying into new products.

Risk description

- In order to fully understand a risk, a detailed description is necessary so that a common understanding of the risk can be identified, and ownership/responsibilities may be clearly understood.
- Risk description Table lists the range of information that must be recorded to fully understand a risk.

Risk description table

Name or title of risk

Statement of risk, including scope of risk and details of possible events and dependencies

Nature of risk, including details of the risk classification and timescale of potential impact

Stakeholders in the risk, both internal and external

Risk attitude, appetite, tolerance, limits for the risk and/or risk criteria

Likelihood and magnitude of event and consequences should the risk materialize at current/residual level

Control standard required, target level of risk or risk criteria

Incident and loss experience

Existing control mechanisms and activities

Responsibility for developing risk strategy and policy

Potential for risk improvement and level of confidence in existing controls

Risk improvement recommendations and deadlines for implementation

Responsibility for implementing improvements

Responsibility for auditing risk compliance

- Risk triggers are “signs” that a risk event is about to occur.
- A risk trigger signals that something more relevant to the project is on the horizon.

Inherent level of risk

- Terminology varies and the inherent level of risk is sometimes referred to as the absolute risk or gross risk.
- Also, the current level of risk is often referred to as the residual level, net level or the managed level of risk.

Risk classification systems

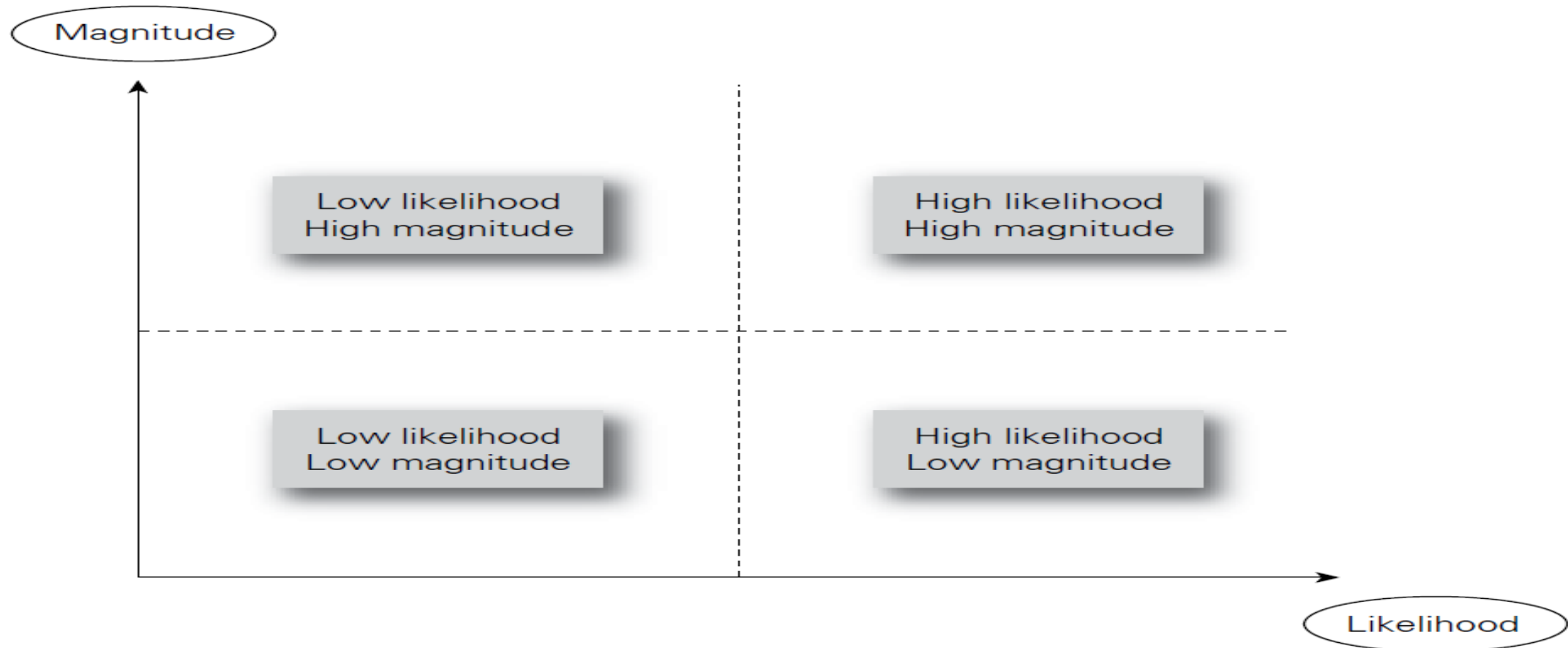
- Risks can be classified according to the nature of the attributes of the risk, such as timescale for impact, and the nature of the impact and/or likely magnitude of the risk.
- The source of the risk can also be used as the basis of classification. In this case, a risk may be classified according to its origin, such as counterparty or credit risk.

Risk classification systems

- Risks may also be classified according to the component or feature of the organization that will be impacted.
- Individual organizations will decide on the risk classification system that suits them best, depending on the nature of the organization and its activities.

Risk classification systems

FIGURE 1.1 Risk likelihood and magnitude

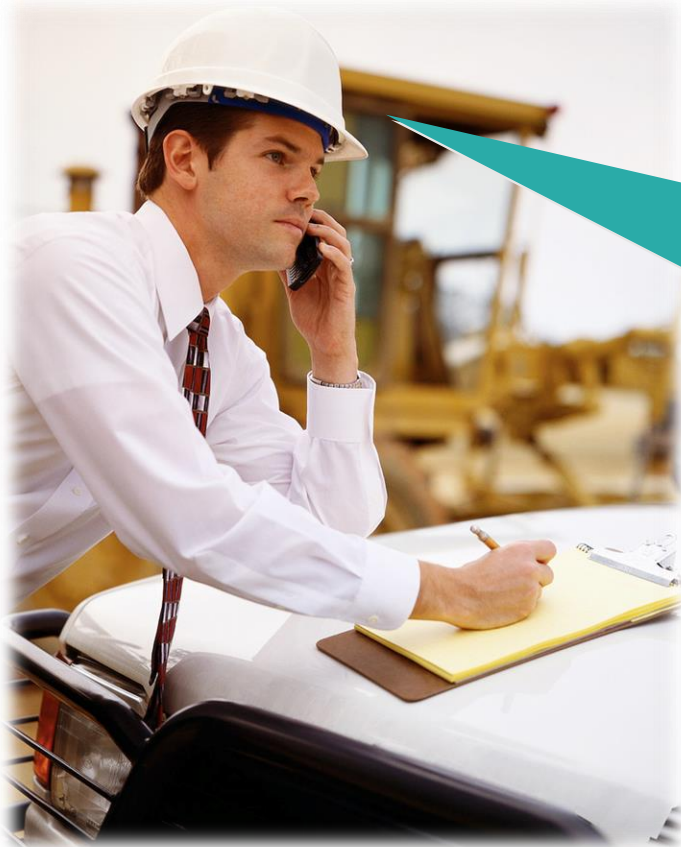


Open thinking

- What risks did you face today as you traveled to the workshop?
- What was the risk?
- How did you manage the risk?

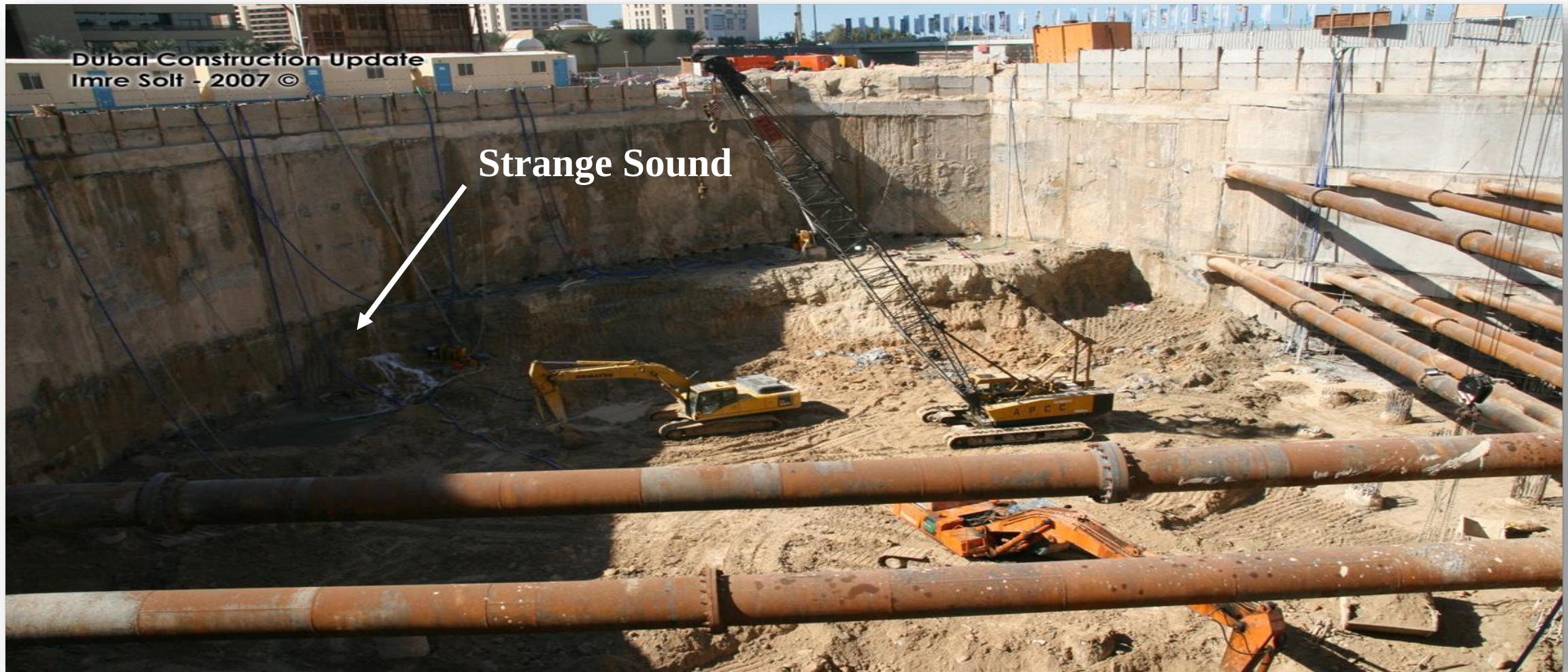


Example



Boss!!!
**There is a strange
sound coming from
the excavation...??!!**

Example



Example



Operational Risk



Without Risk Management!!



You will be surprised by the **Threats**
surrounding you and will miss
Opportunities, as well!

Why does Risk Management

- Good risk management can save time, improve quality, and reduce the costs of achieving an agreed outcome.
- Effective risk management can be a significant contributor to project success.

Benefits of Risk Management

'HARD' (tangible)

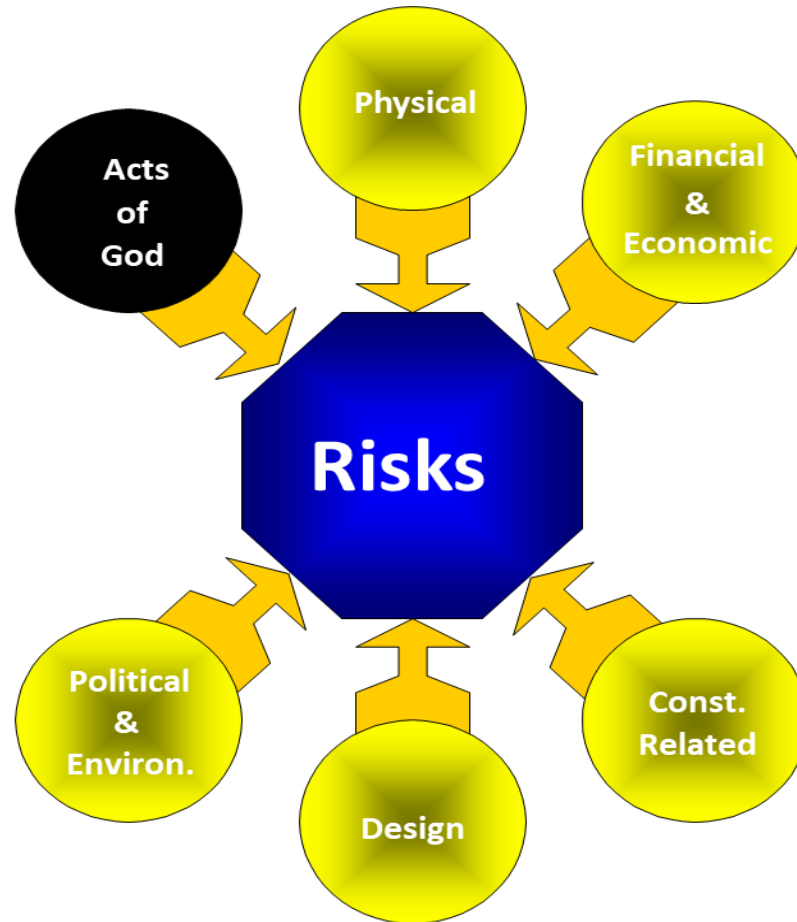
- Enables better informed and more believable plans, schedules and budgets
- Increases the likelihood of a project adhering to its schedules and budgets
- Leads to the use of the most suitable type of contract
- Allows a more meaningful assessment of contingencies
- Contributes to the build-up of statistical information to assist in better management of future projects
- Enables a more objective comparison of alternatives
- Identifies, and allocates responsibility to, the best risk owner

Benefits of Risk Management

‘SOFT’ (intangible)

- Improves corporate experience and general; communication
- Leads to a common understanding and improved team spirit
- Helps distinguish between good luck / good management and bad luck / bad management
- Helps develop the ability of staff to assess risks
- Focuses project management attention on the real and most important issues.

Risk Examples



Acts of God

- ✓ Flood
- ✓ Earthquake
- ✓ Landslide
- ✓ Fire
- ✓ Wind damage

THANK YOU