

Project Risk Management

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Lecture 1

جامعة الجميع الذكية

MGM 510
Project Risk Management



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Topics to Cover in Week 1

- Project Meaning
- Definition of risk.
- Risks vs. problems.
- Risk triggers.
- Risk management: what & how ????



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Meaning of “ Project “

A project: is a temporary endeavor undertaken to create a unique product, service, or result.

Project characteristic:

- ▶ Projects are temporary.

Has definite beginning and end, the end is reached when the project's objective have been achieved.

- ▶ Projects are unique.

Every project creates a unique product, service, or results.

- ▶ Progressively elaborated.

Progressively: proceeding in steps.

Elaborated: worked with care and detail.



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Meaning of “ Project “

- ❑ The temporary nature of projects indicates that a project has a definite beginning and end.
- ❑ Temporary does not necessarily mean a project has a short duration.
- ❑ The end of the project is reached when one or more of the following is true:
 - The project's objectives have been achieved;
 - The objectives will not or cannot be met;



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Project Ending

- Funding is exhausted or no longer available for allocation to the project;
- The need for the project no longer exists (e.g., the customer no longer wants the project completed, a change
- in strategy or priority ends the project, the organizational management provides direction to end the project);
- The human or physical resources are no longer available; or
- The project is terminated for legal cause or convenience.



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- When the word “risk” is mentioned, most people tend to think of negative consequences.
- A risk is a possible/potential event.
- An example is fluctuations in exchange rate.



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Meaning of Risk

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



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Risk VS Problem



- 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.



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Definitions of 'Risk'

'Effect of uncertainty on objectives' - "تأثير عدم اليقين على الأهداف"

ISO 3100:2009 Risk Management – Principles and Guidelines

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

الملاحظة 1 - التأثير هو التغير عن المتوقع إما إيجاباً أو سلباً أو كليهما

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).

الملاحظة 2 – قد يكون للأهداف أبعاد مختلفة (مثل الأهداف المالية ، والصحة والسلامة ، والأهداف البيئية) ويمكن تطبيقها على مستويات مختلفة مثل (الاستراتيجية ، على مستوى المنظمة ، المشروع ، المنتج والعملية).



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Definitions of 'Risk'

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

الملاحظة 3 - تتصنف المخاطر في كثير من الأحيان بالرجوع إلى الأحداث والعواقب المحتملة ، أو مزيج منها.

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.

الملاحظة 4 - يُعبّر عن المخاطر في كثير من الأحيان من خلال مجموعة من عواقب الحدث (بما في ذلك التغيير في الظروف) وما يرتبط به من احتمالية حدوثه.

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

الملاحظة 5 - عدم اليقين هو حالة حتى ولو كانت جزئية ، لنقص المعلومات المتعلقة بفهم او معرفة عواقب او احتمالية حدوث حدث ما.



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Definitions of 'Risk'

'Uncertainty of outcome, whether positive opportunity or negative threat, of actions and events. It is the combination of likelihood and impact, including perceived importance.'

"عدم اليقين من نتائج الأحداث أو الأفعال سواء كانت نتائج إيجابية (فرص) أو نتائج سلبية (تهديد) ، ولذلك فإن القيمة المتوقعة لأهمية الخطورة و تكون مزيج بين الاحتمالية والتأثير.

UK HM Treasury, The Orange Book, 2004

'The likelihood, measured by its probability, that a particular event will occur.'

"الارجحية ، تقاس باحتمالية وقوع حدث معين".

UK HM Treasury, The Green Book, July 2011



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Definitions of 'Risk'

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

"**الخطورة** هو احتمال حدوث ضرر ناتج عن خاصية جوهرية أو التصرف في شيء ما لإلحاق الضرر".

'**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.'

"**الخطورة** هي فرصة حدوث (سواء كانت عالية أو منخفضة) ضرر شخص ما أو شيء ما، وكذلك مدى خطورة الضرر".

UK Health and Safety Executive – www.hse.gov.uk/risk/index.htm



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- 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.



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Open thinking

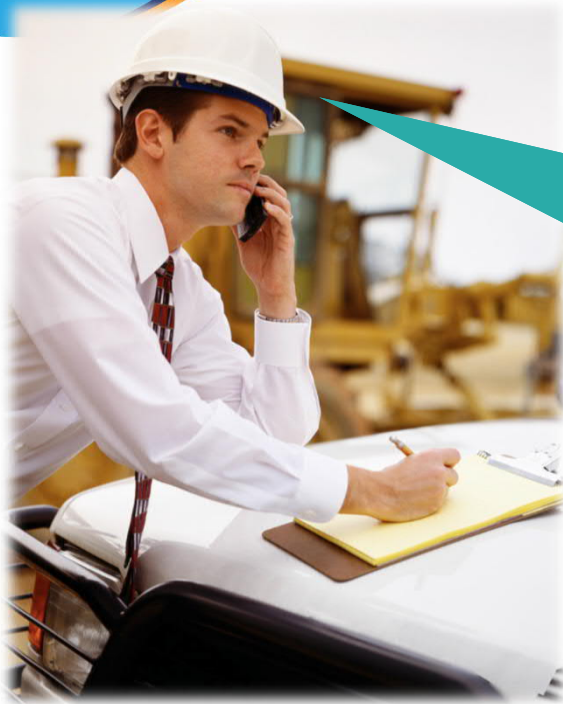
- What risks did you face today as you traveled to the workshop?
- What was the risk?
- How did you manage the risk?



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Example



Boss!!!

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



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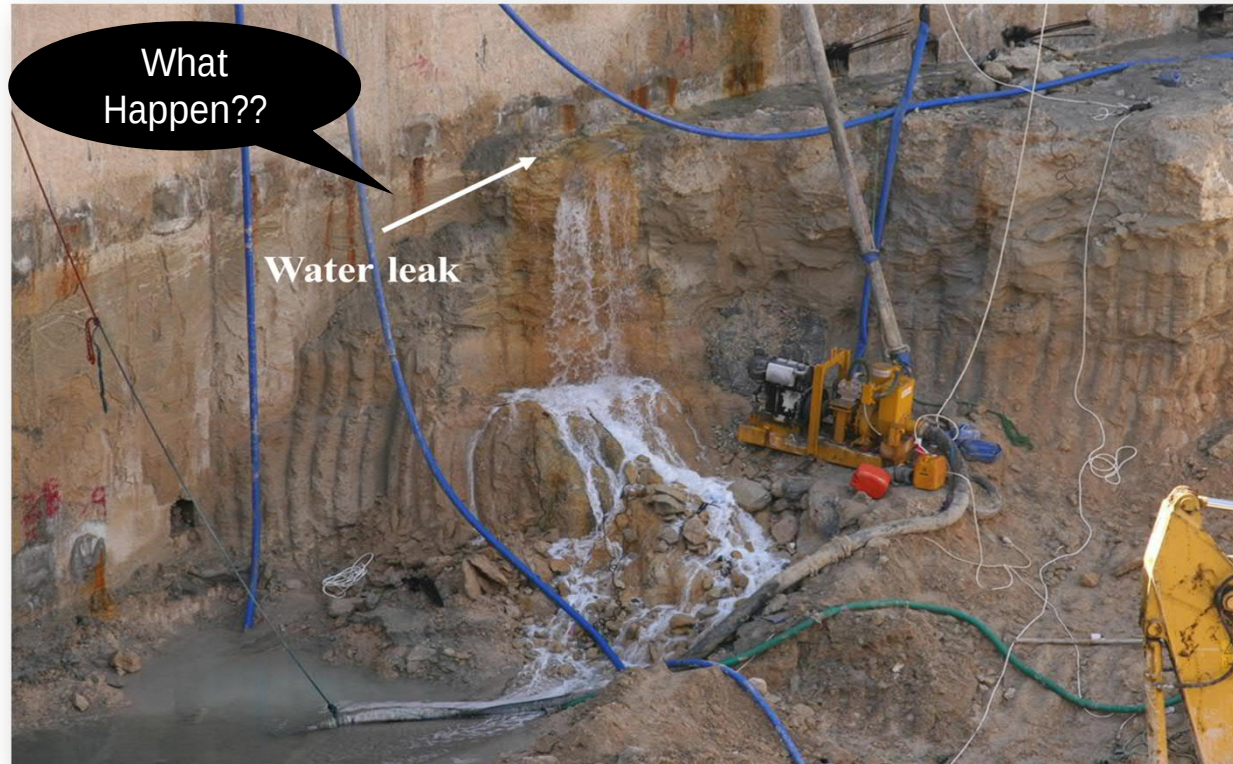
Example



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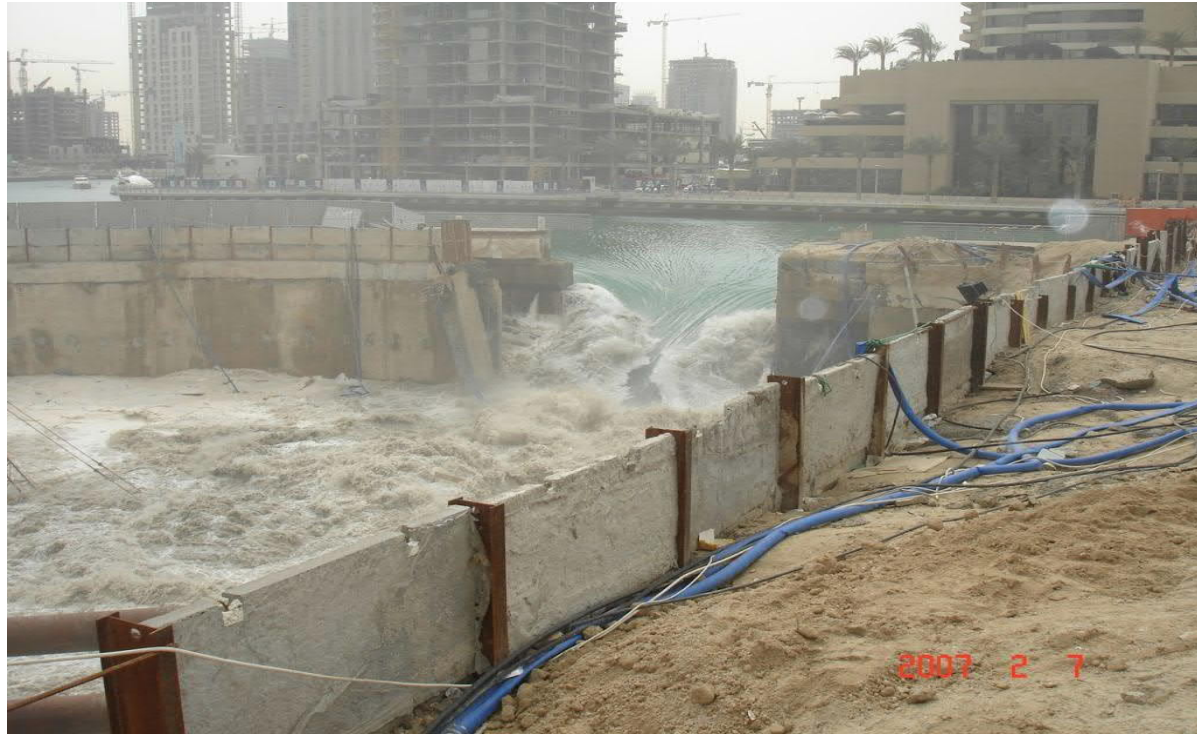
Example



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Operational Risk



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Without Risk Management!!



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



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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.



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Why does Risk Management

- Analysis of common causes of project failure by the UK's National Audit Office (NAO) highlighted the following:
 - Importance of starting well
 - Residual uncertainty related to following aspects can put project at risk:
 - Size
 - Timescale
 - Ambition / scope
 - Complexity.



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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



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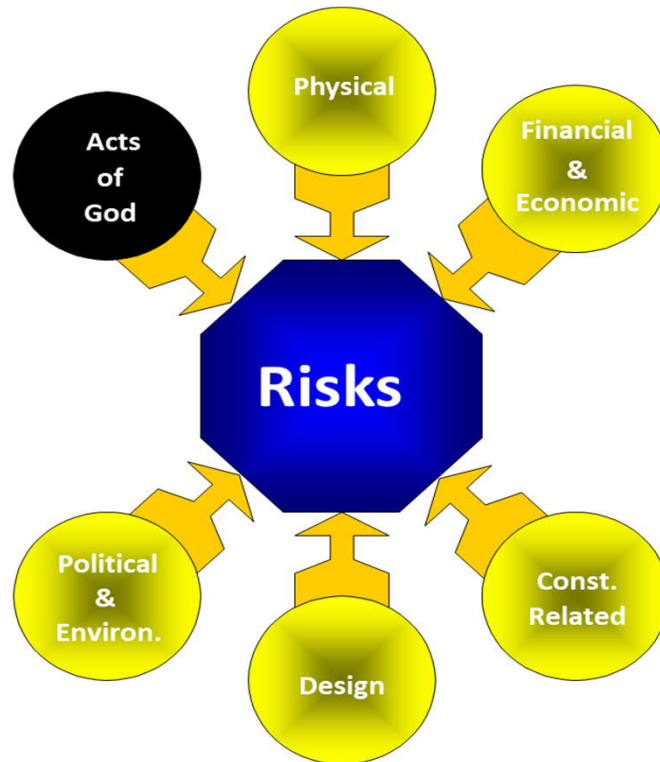
‘SOFT’ (intangible)

- 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.



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Risk Examples



Acts of God

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

