Rational Approach to Control System Development

(Project Management and Risk)

Elder Matias
Elder..matias@mightyoaks.com
http://www.mightyoaks.com/

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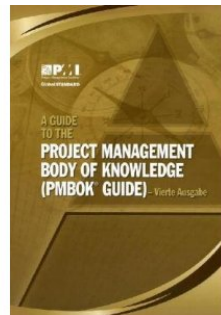Light de rayonnement
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The Challenge….

- Multiple (conflicting) projects and priorities
- Staff with different past experience and expectations
- Different understanding of the risks and risk tolerance in the organisation
- More restricted budgets

- Increased pressure to delivery on time and on budget

What is PMI & PMBOK about?

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It is a standardised way of approaching and talking about projects.

- Will it guarantee my project is a success?
  - No (Guarantee is such a strong term.).

- Can I be successful doing it my way?
  - Maybe

- Will it make project handover to others easier?
  - Yes

- Will it make my project reporting more transparent?
  - Yes
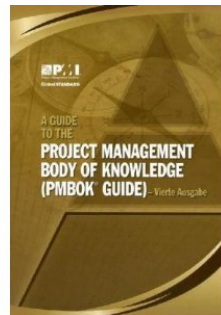
If PMI will not guarantee success what will?

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Pay attention….

- Analyse your project
- Understand what are the risks
- Identify those that are important
- Develop reasonable mitigation
- Know when your in trouble and take appropriate action.

What is Risk?

- ISO 31000:2009 – Risk Management Principles and Guidelines defines risk as *"the effect of uncertainty on objectives"*.

  effect = deviation from the expected

- *ISO 31000:2009* defines risk management as *"coordinated activities to direct and control an organization with regard to risk"*.

- Impact (Severity) of Harm and Likelihood it will occur

Is this the only risk management program?

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Three risk programs?

- Projects
- Safety
- ERM

Multiple Risk registries?

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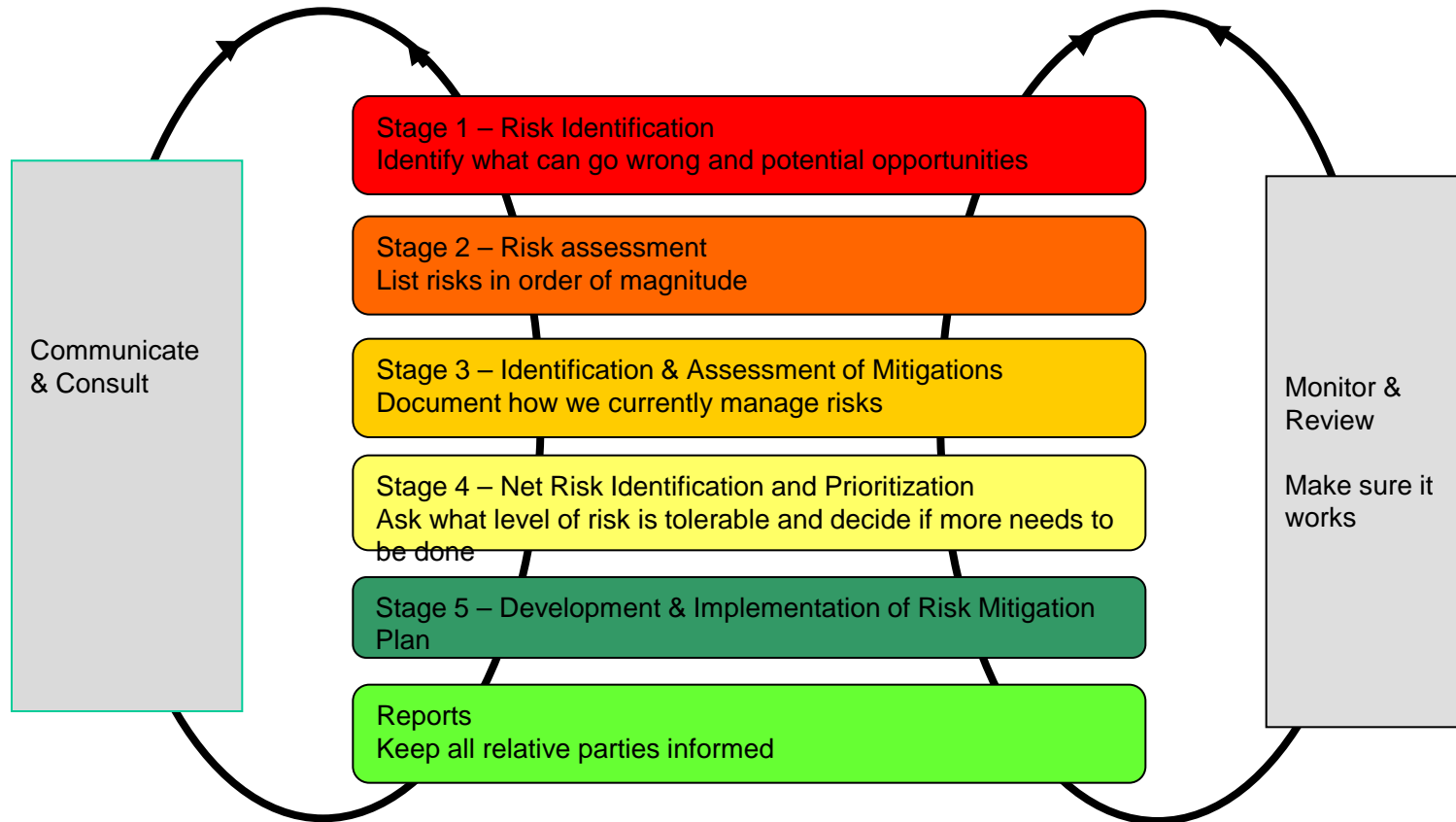
Multiple Risk registries?
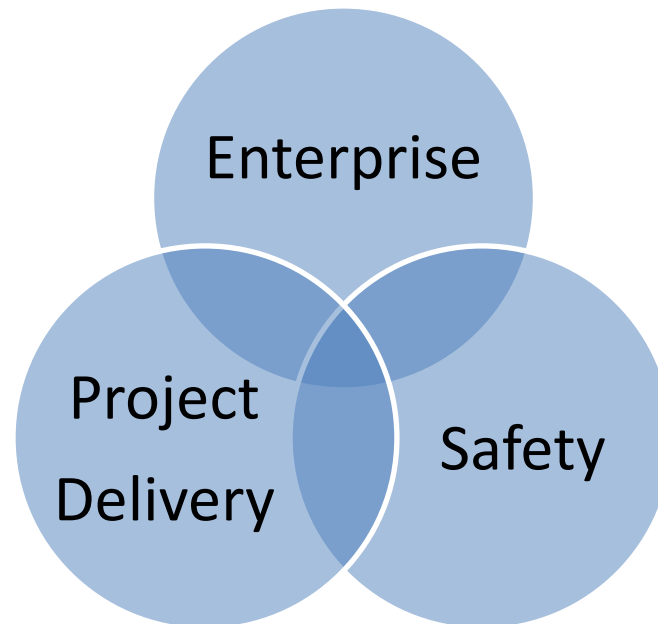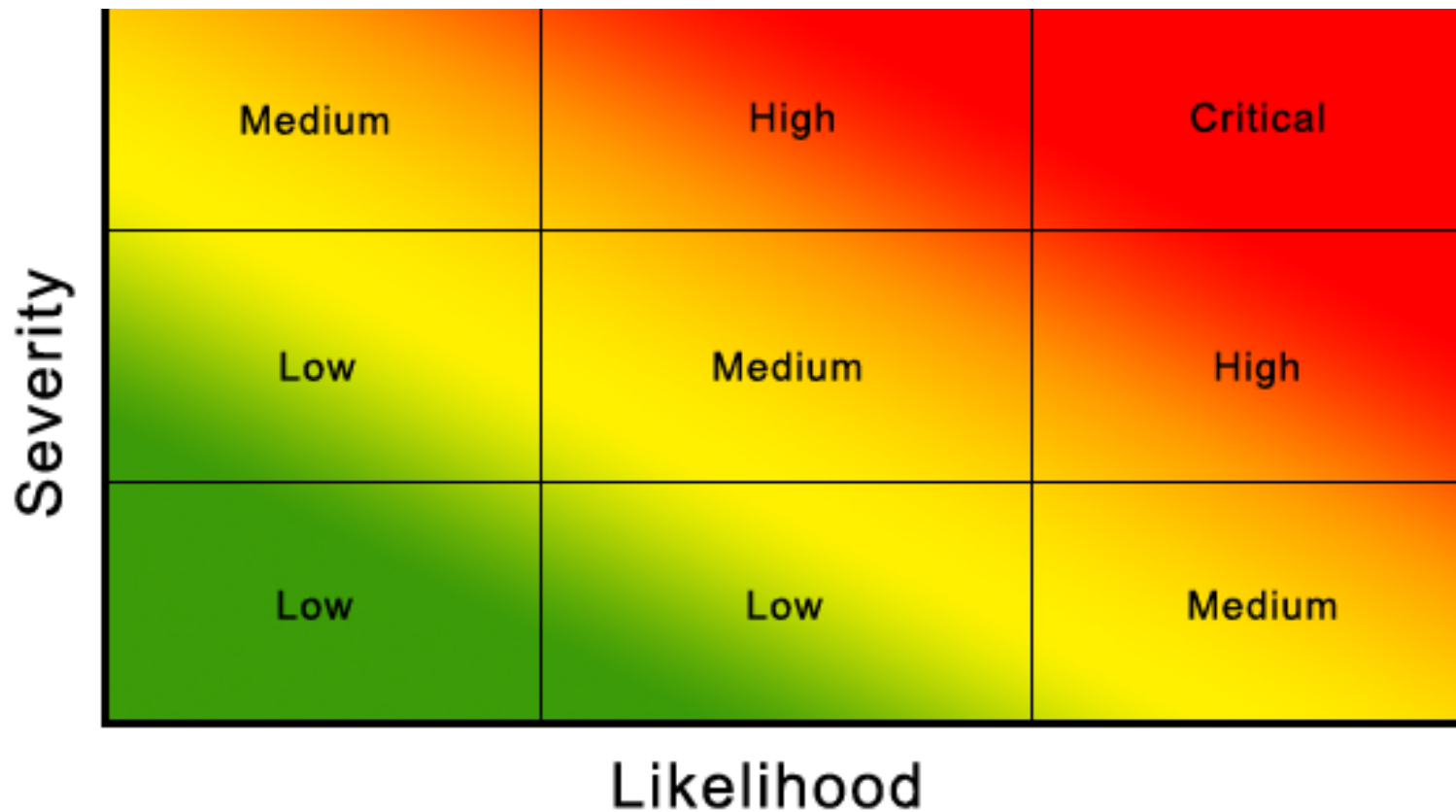
Severity Attributes

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- Project
  - Budget, Schedule, Scope
- ERM
  - Financial, Operational, Reputation, Regulatory
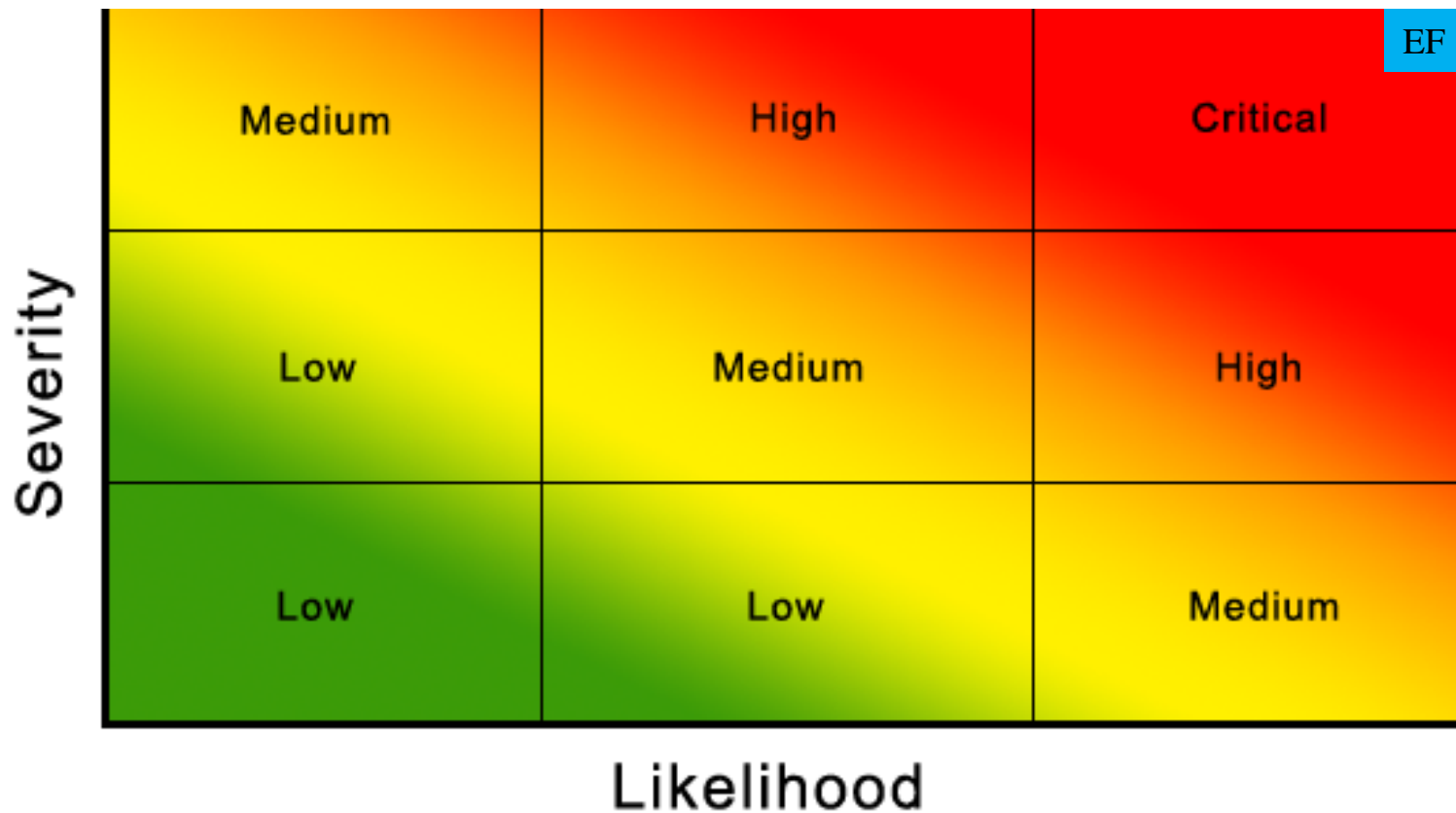- Safety
  - Conventional Safety and Radiological Safety.

ERM Process....

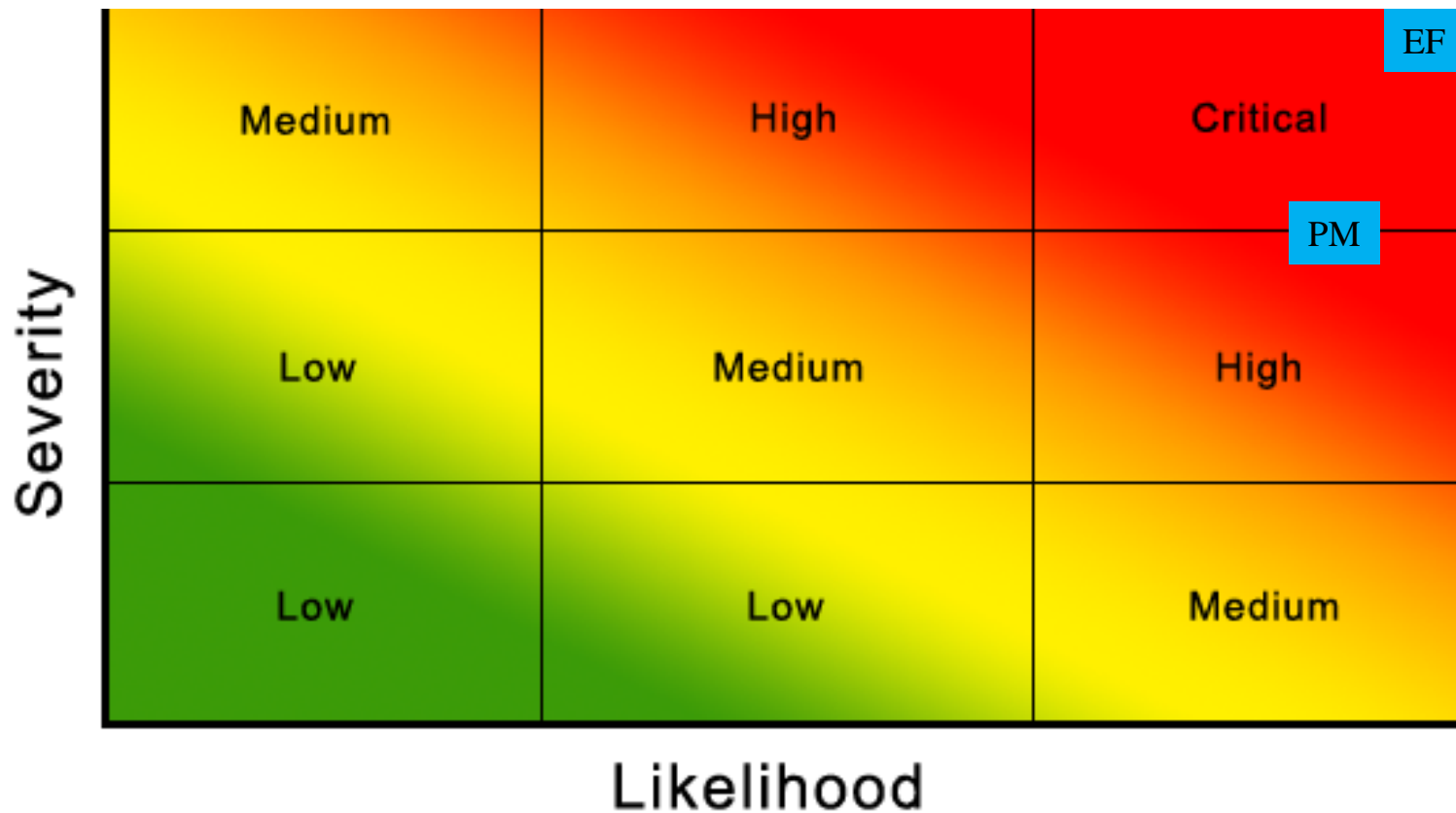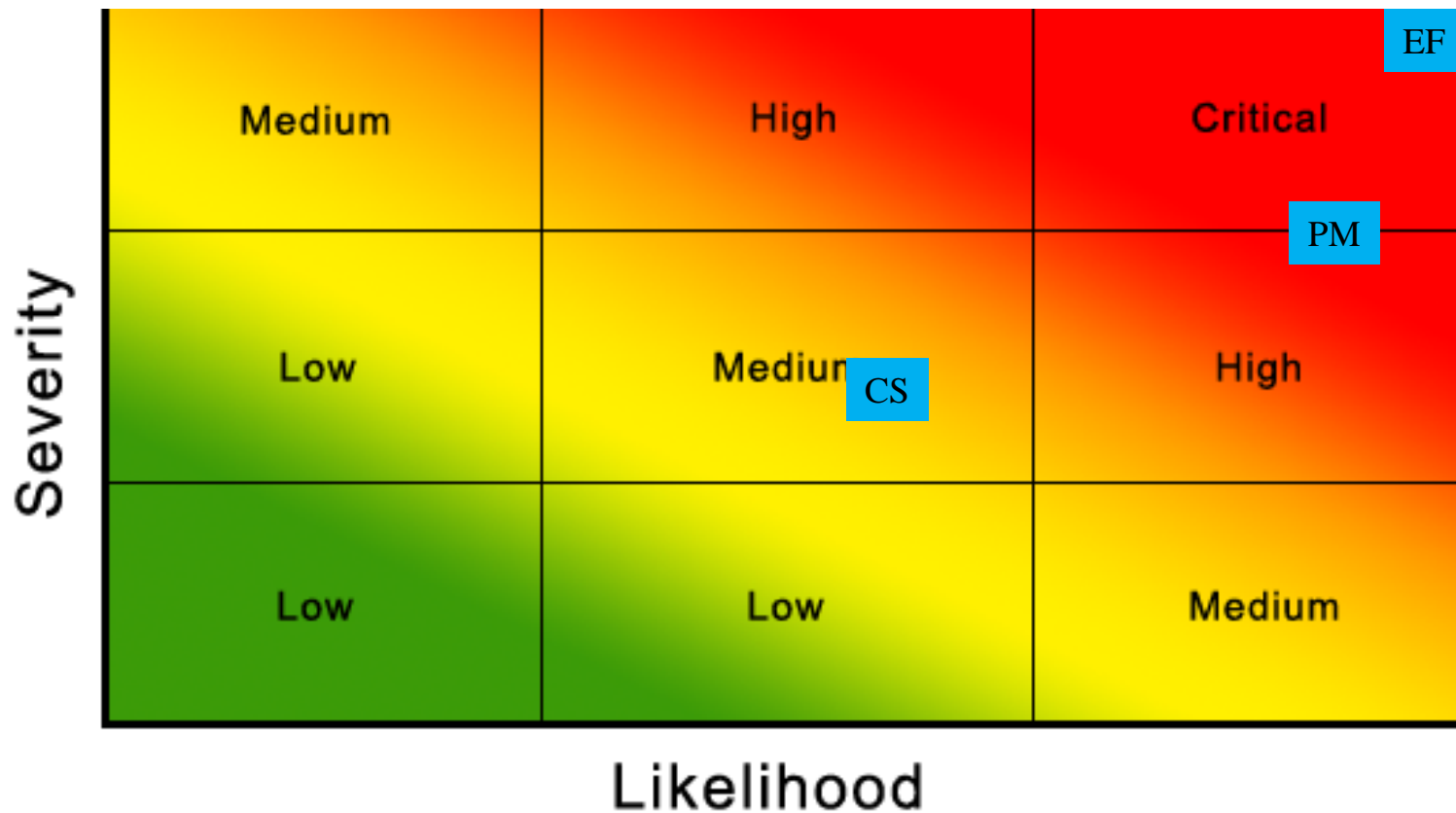**Communicate & Consult**

Stage 1 – Risk Identification
Identify what can go wrong and potential opportunities

Stage 2 – Risk assessment
List risks in order of magnitude

Stage 3 – Identification & Assessment of Mitigations
Document how we currently manage risks

Stage 4 – Net Risk Identification and Prioritization
Ask what level of risk is tolerable and decide if more needs to be done

Stage 5 – Development & Implementation of Risk Mitigation Plan

Reports
Keep all relative parties informed

Monitor & Review

Make sure it works

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Heat Map

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Heat Map

Are you establishing priorities?

- Yes.
- At the ERM level you are establishing priorities for the lab.
- At the project level you are establishing priorities for the project.

- Is this a more systematic approach?

Software?

Brining it All Together….

- ERM helps establish priorities for mitigation

- The mitigation may take the form or a project

- Projects used risk management to help plan the project

- Multiple risk registries across projects safety and ERM

Constraints & Creativity

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- Constraints are generally good
- Creativity does not exist without constraints

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Thank you….

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