



# Rational Approach to Control System Development

(Project Management and Risk)

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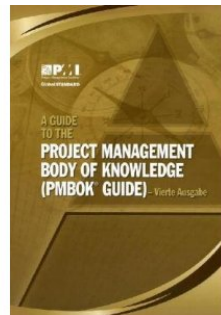
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# The Challenge....

- 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



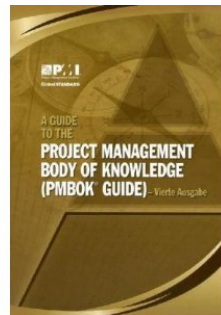
# What is PMI & PMBOK about?



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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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# If PMI will not guarantee success what will?

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?

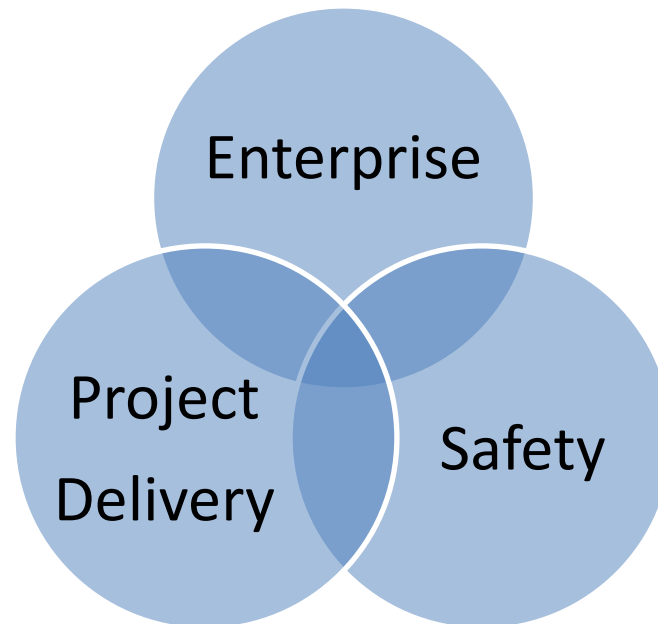


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# Severity Attributes

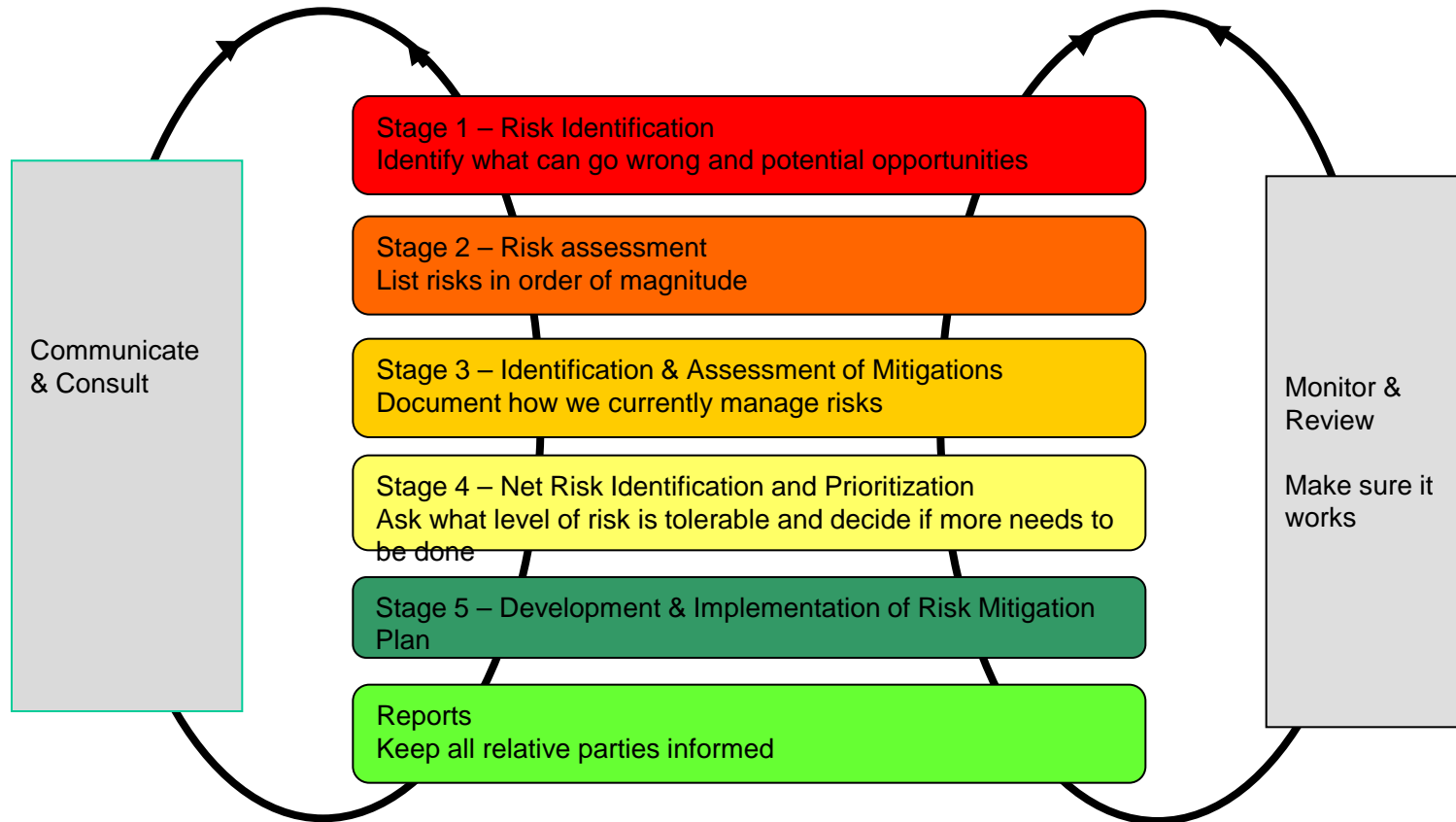


# Severity Attributes

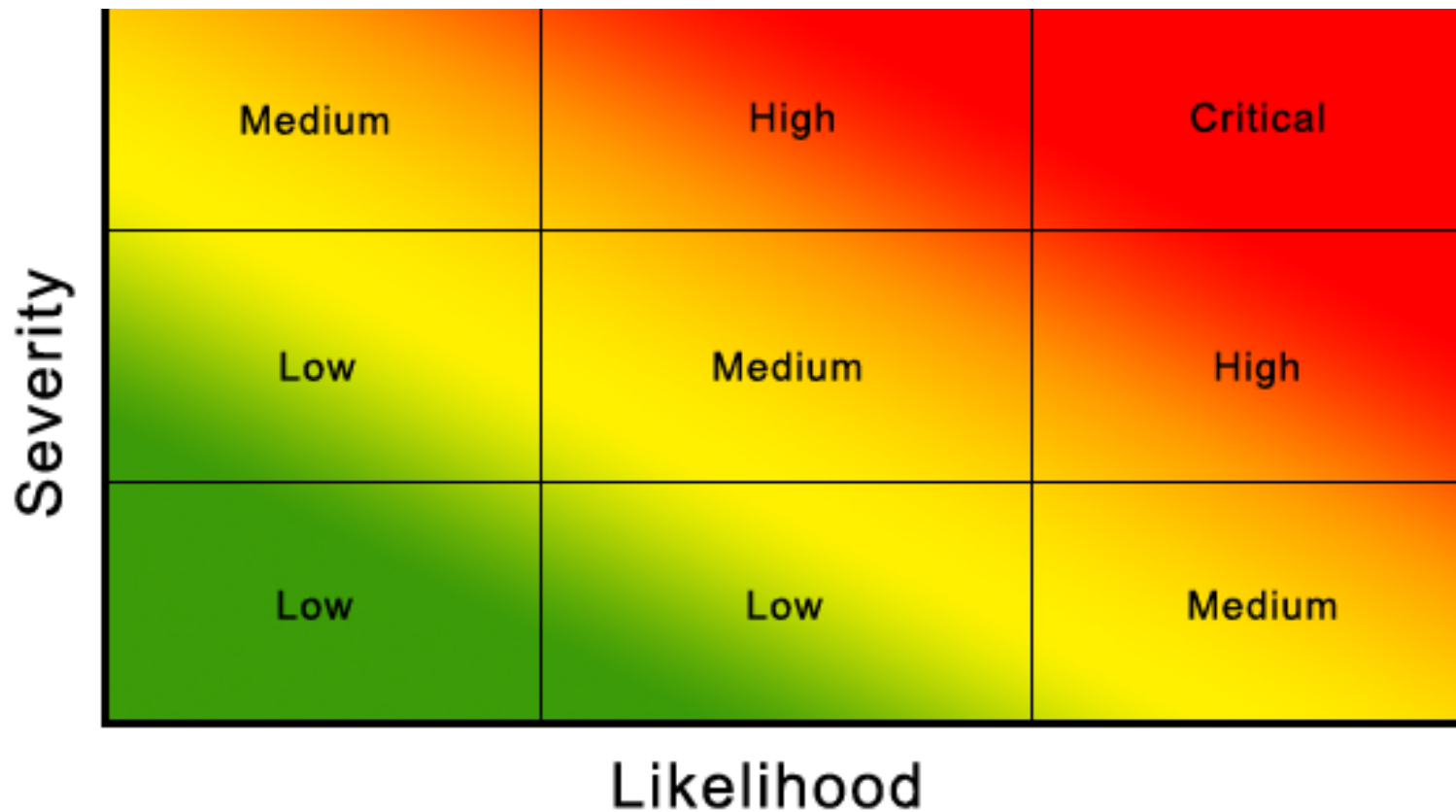
- Project
  - Budget, Schedule, Scope
- ERM
  - Financial, Operational, Reputation, Regulatory
- Safety
  - Conventional Safety and Radiological Safety.



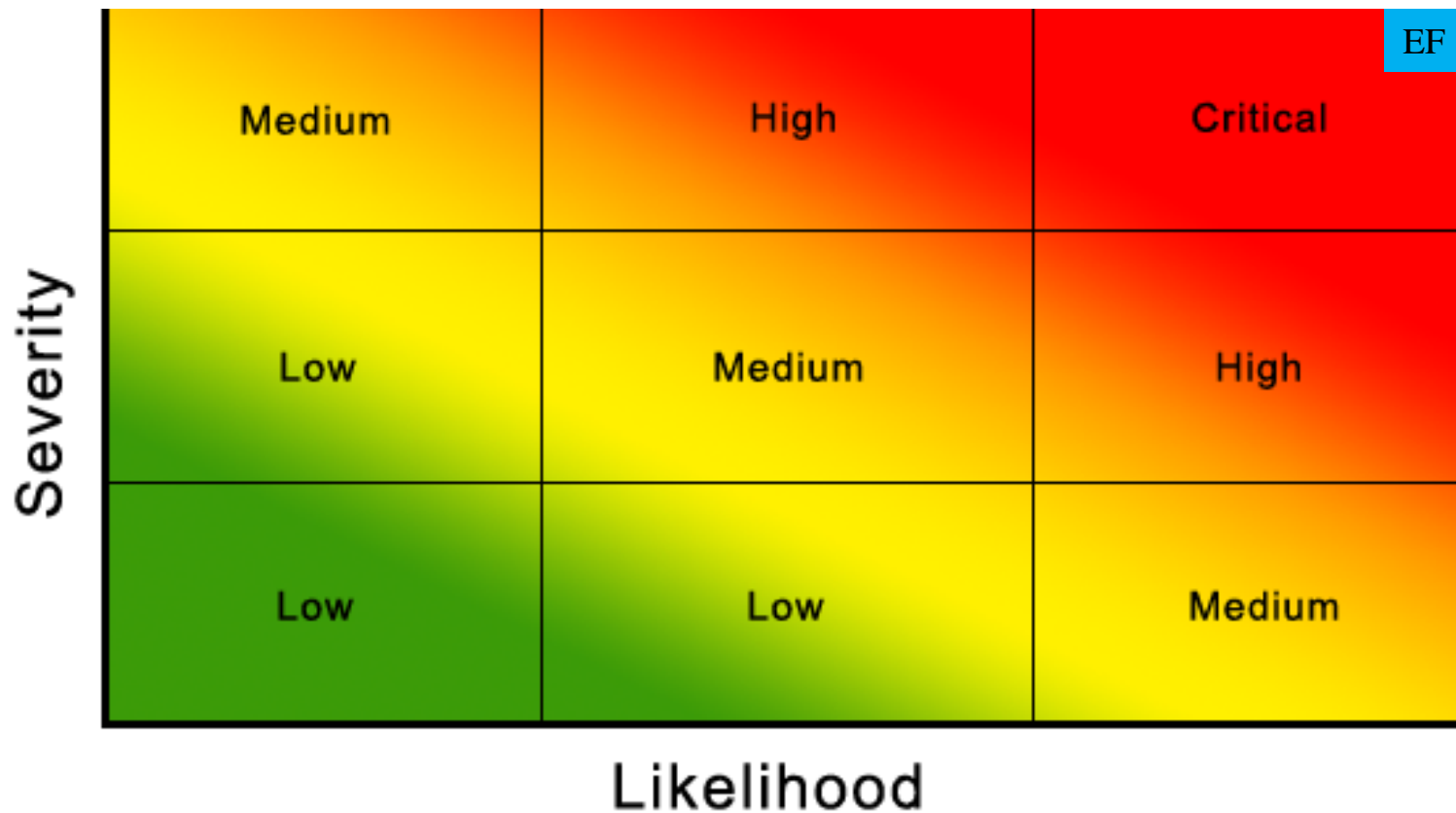
# ERM Process....



# Heat Map

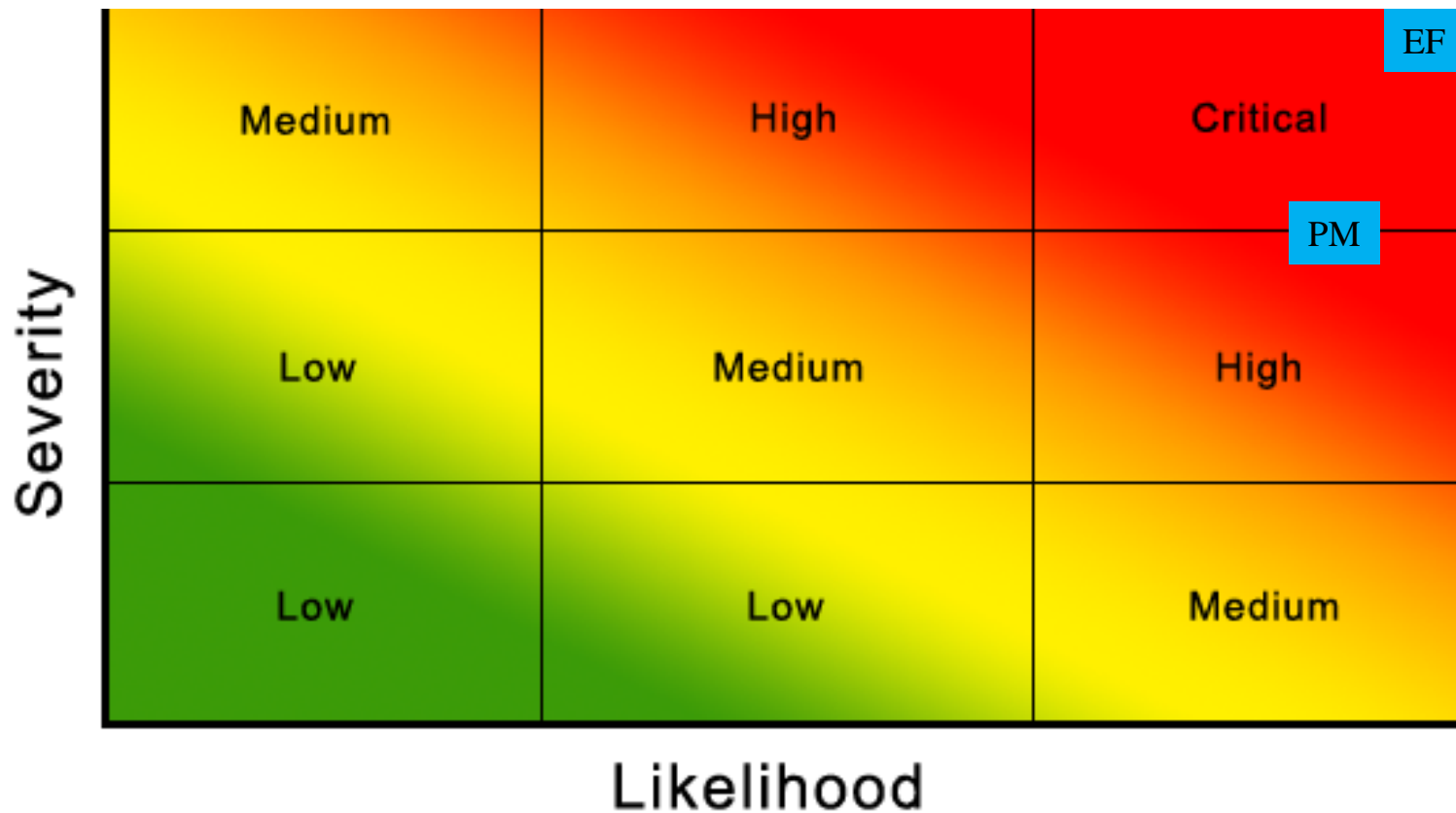


# Heat Map

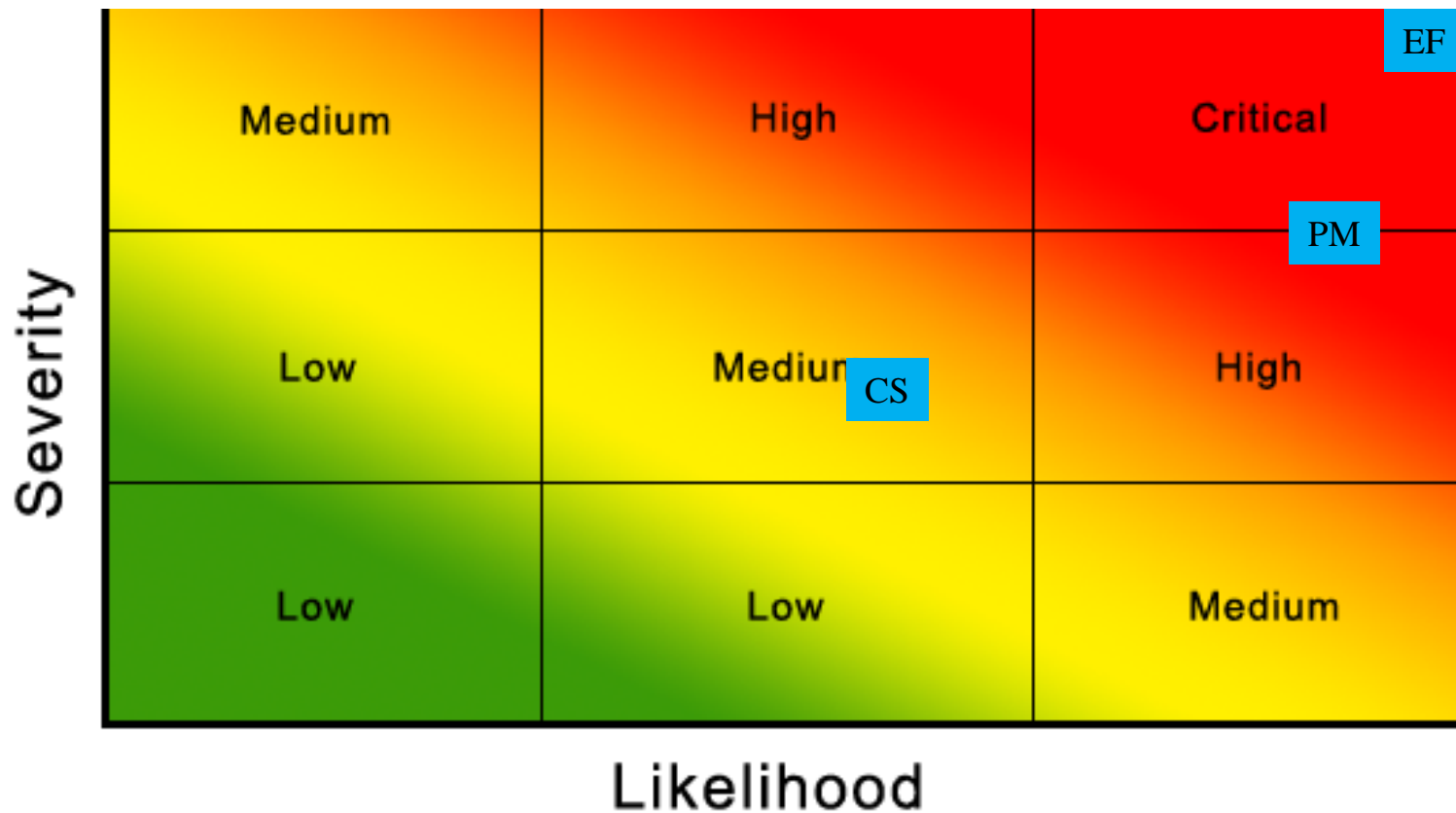




# Heat Map



# Heat Map



MIGHTY OAKS



Canadian Centre canadien  
Light de rayonnement  
Source synchrotron

# 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?



SoftExpert Excellence Suite - Mozilla Firefox

File Edit View History Bookmarks Tools Help

SoftExpert Excellence Suite

customers.4binc.com/se/index.php

Robert Smith - PMO

Components Portfolio View Initiative

To-do tasks (0) Favorites (0) Account

Quick search

Menu

Components

Document

FMEA

Inspection

Maintenance

MSA

PDM

Performance

Portfolio

File

Management

Execution

View

Initiative

Revision

To-do task

Configuration

Process

Project

Protocol

Request

My menu

Shortcuts

Browse Search

Initiative type

IT-IT Applications

Mkt-Marketing

NPD-New Product Development

QA-Quality Assurance

Str-Strategic

Details

F	IS	AS	Initiative type	ID #	Name	Revision	Evaluation
☆	■		IT - IT Applications	00001	Cloud computing	0	725,00
☆	■		IT - IT Applications	00002	Mobile workforce	0	910,00
☆	■		IT - IT Applications	00004	Single Sign-on	0	695,00
☆	■		IT - IT Applications	00005	Data Center infrastructure migration	0	680,00
☆	■		Str - Strategic	00006	Spiral Plastic Pipe for water sewage	0	800,00
☆	■		Str - Strategic	00007	Hot/cold water tube connection structure for plastic faucets	0	830,00
☆	■		Str - Strategic	00009	high pressure fluid connectors	0	
☆	■		NPD - New Product Development	00010	High Pressure Water Faucet	0	875,00
☆	■		NPD - New Product Development	00013	High pressure water faucet for plastic system	0	865,00
☆	■		NPD - New Product Development	00014	Dual voltage motor vehicle electrical system	0	875,00
☆	■		Str - Strategic	00015	Create a Consultancy Project Management Office	0	
☆	■		NPD - New Product Development	00016	New Gear Box	0	940,00

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# 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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