



Risk & Opportunity Management: Requirements for Team Collaboration

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HRA-INCOSE Risk Management Seminar

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Agenda

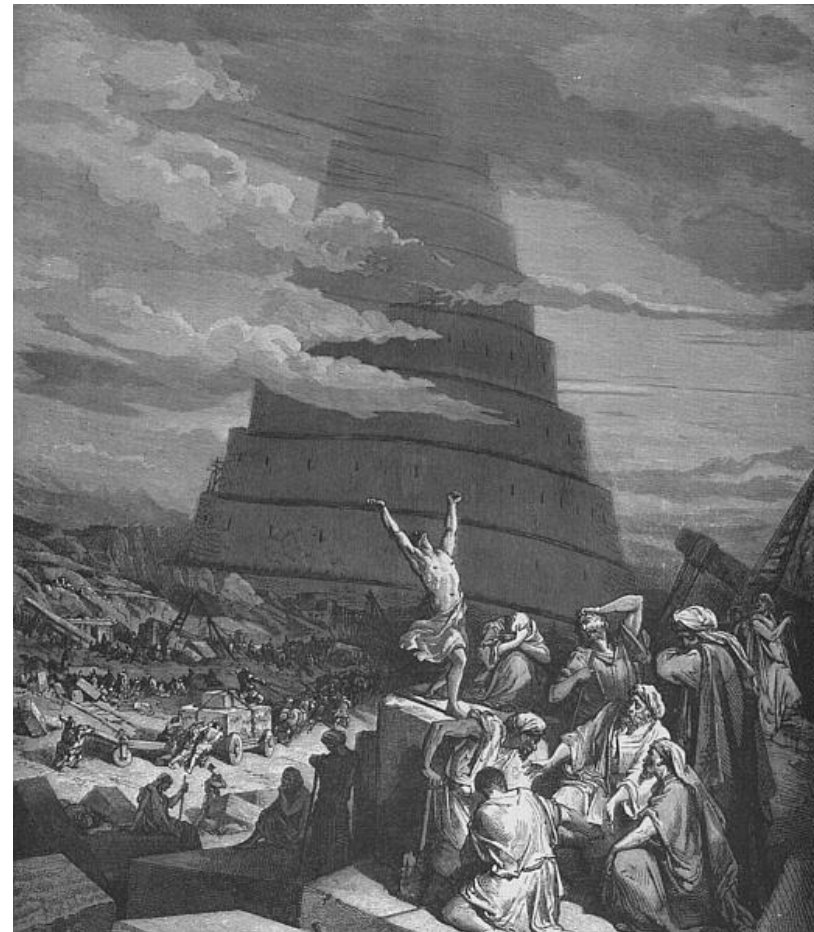
- Introduction
- Requirements
- Tools
- Questions

Introduction

Collaboration failure

- Lack of:
 - Sponsorship
 - Common Language
 - Common Process

“Communication”

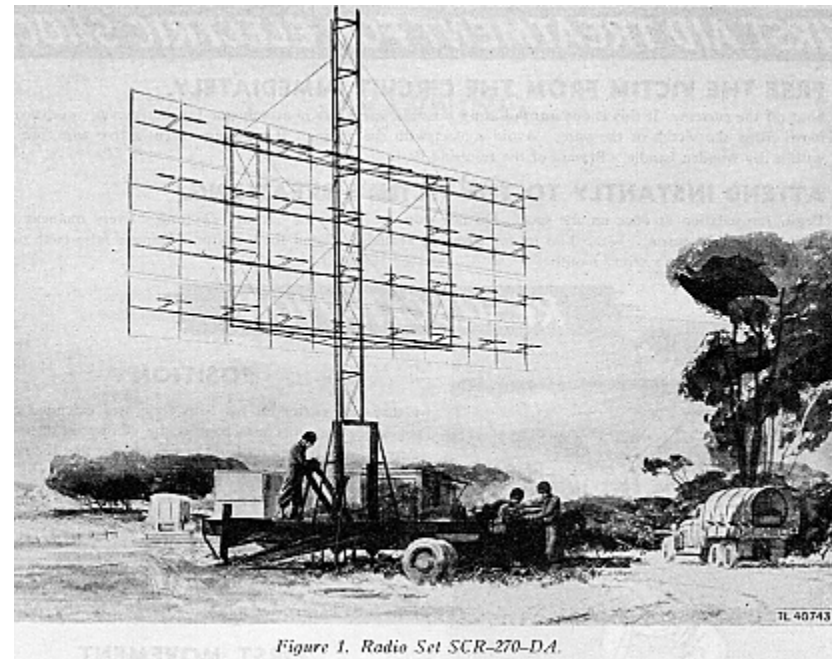


Engraving: *The Confusion of Tongues* by Gustave Doré (1865),
Tower of Babel

Introduction

Collaboration failure

- Lack of process:
 - Understanding
 - Application



Requirements

- Sponsorship
- Common Language
- Common Process
- Scalable
- Partition-able
- Accessible
- Interface-able



Sponsorship

- Top down support
- Clear objectives
- Customer involvement
- Full life cycle
- Across the organization
- Drives culture
- Sufficient funding

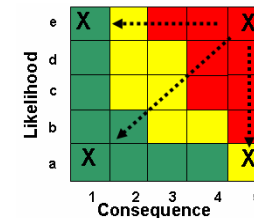
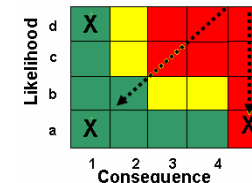
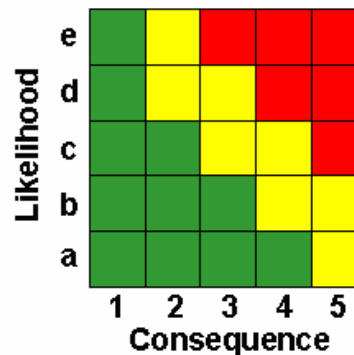


Common Language

■ Cubes, cubes, and more cubes

- High** – Major program disruption, immediate priority management action required
- Moderate** – Moderate disruption, possible management action required
- Low** – Minimum impact

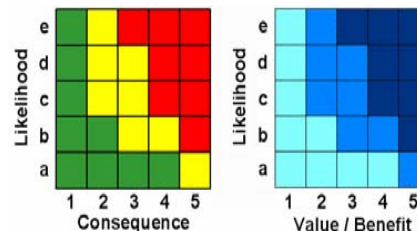
Assessment Guide



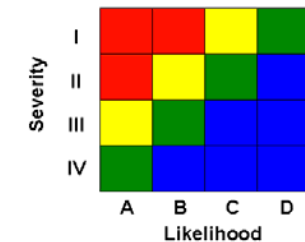
Risk Matrix

Risk Assessment Code
 1 = Critical
 2 = Serious
 3 = Moderate
 4 = Minor
 5 = Negligible

Severity		Probability			
		A	B	C	D
I	1	1	2	3	
II	1	2	3	4	
III	2	3	4	5	
IV	3	4	5	5	



- Critical: Death, Loss of Asset
- Serious: Severe Injury and/or Degradation of Asset
- Minor: Minor Injury and/or Degradation of Asset
- Negligible: Minimal Injury and/or Degradation of Asset



Common Language

■ Likelihood, Probability

Probability Levels		
Level	Chance of Occurrence	Your Typical Approach and Processes
A	Not Likely: 10% chance	Will effectively avoid this risk based on standard practices
B	Low Likelihood: 30% chance	Have usually avoided this type of risk with minimal oversight in similar cases
C	Moderate: 50% chance	May avoid this risk, but workarounds will be required
D	Highly Likely: 70% chance	Cannot avoid this risk with standard practices, but a different approach may work
E	Near Certainty: 90% chance	Cannot avoid this risk with standard practices, may not be able to mitigate

DoD Risk Management Handbook, August 2006

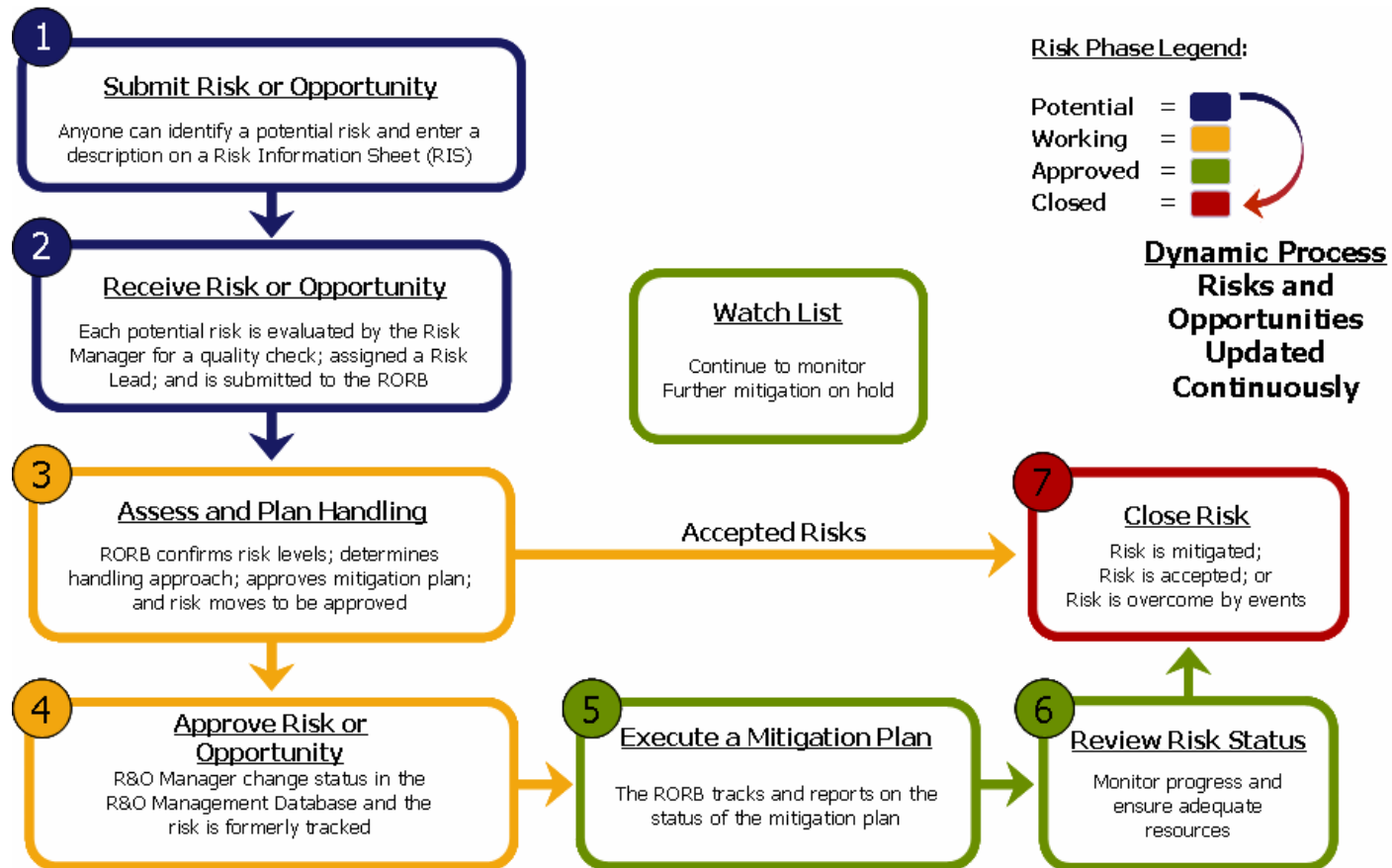
Common Language

■ Consequences

Consequence Levels			
Level	Technical Performance	Schedule Impact	Cost
1 – Negligible	Minimal or no technical performance impact; same approach retained	Minimal schedule slip but able to meet need dates w/o additional resources. Critical path unaffected	Minimal or No Impact
2 – Marginal	Minor technical performance shortfall and/or small reduction in margin. Minor changes may be needed.	Minimal schedule slip requiring additional resources to meet need dates. Critical path unaffected.	Less than 1% of Budget
3 – Moderate	Moderate technical performance shortfall and/or significant reduction in margin. Workarounds available.	Significant schedule slip. Delivery or readiness for a mission critical path may be affected.	1% to Less Than 5% of Budget
4 – Critical	No remaining margin. Severe technical performance shortfall or not achieving a Key Performance Parameter (KPP). Workarounds are available.	Major schedule slip. Will miss Milestone date. Mission readiness affected (<1 month)	5% to Less Than 10% of Budget
5 – Catastrophic	Unacceptable technical performance shortfall will result in KPP breach with no known workarounds. Project will be undeliverable or unavailable for a mission.	Major schedule slip. Mission readiness affected (>1 month)	Greater Than 10% of Budget

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Common Process

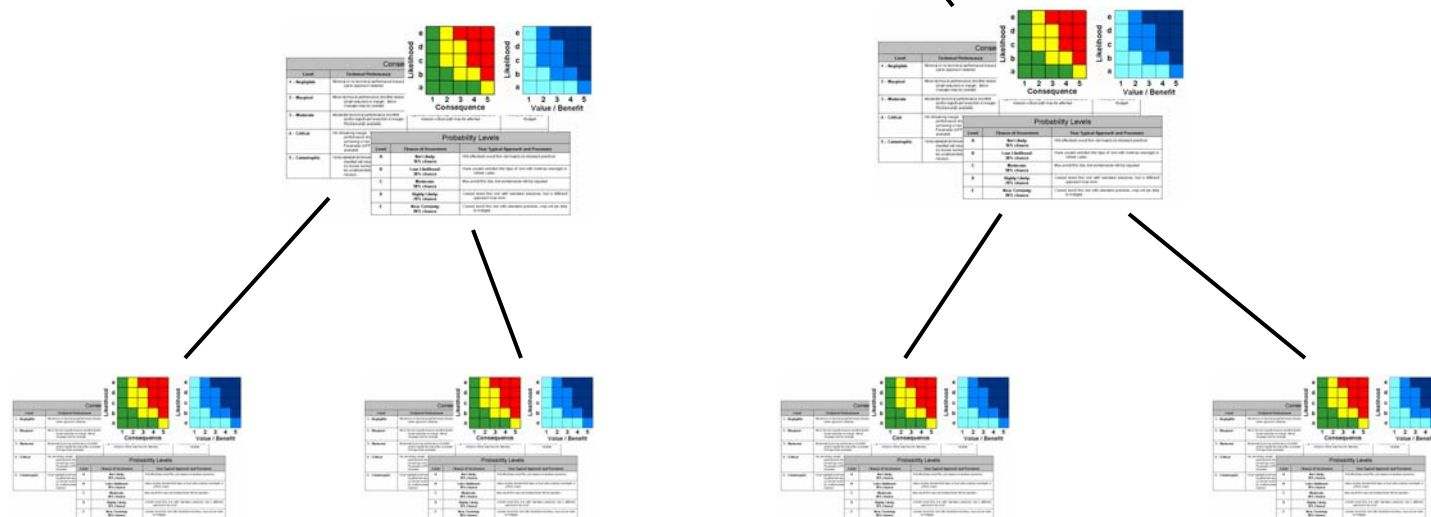
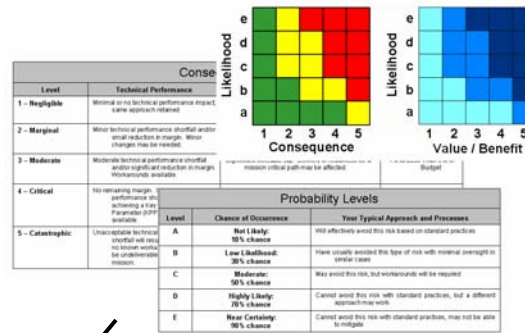


Scalable

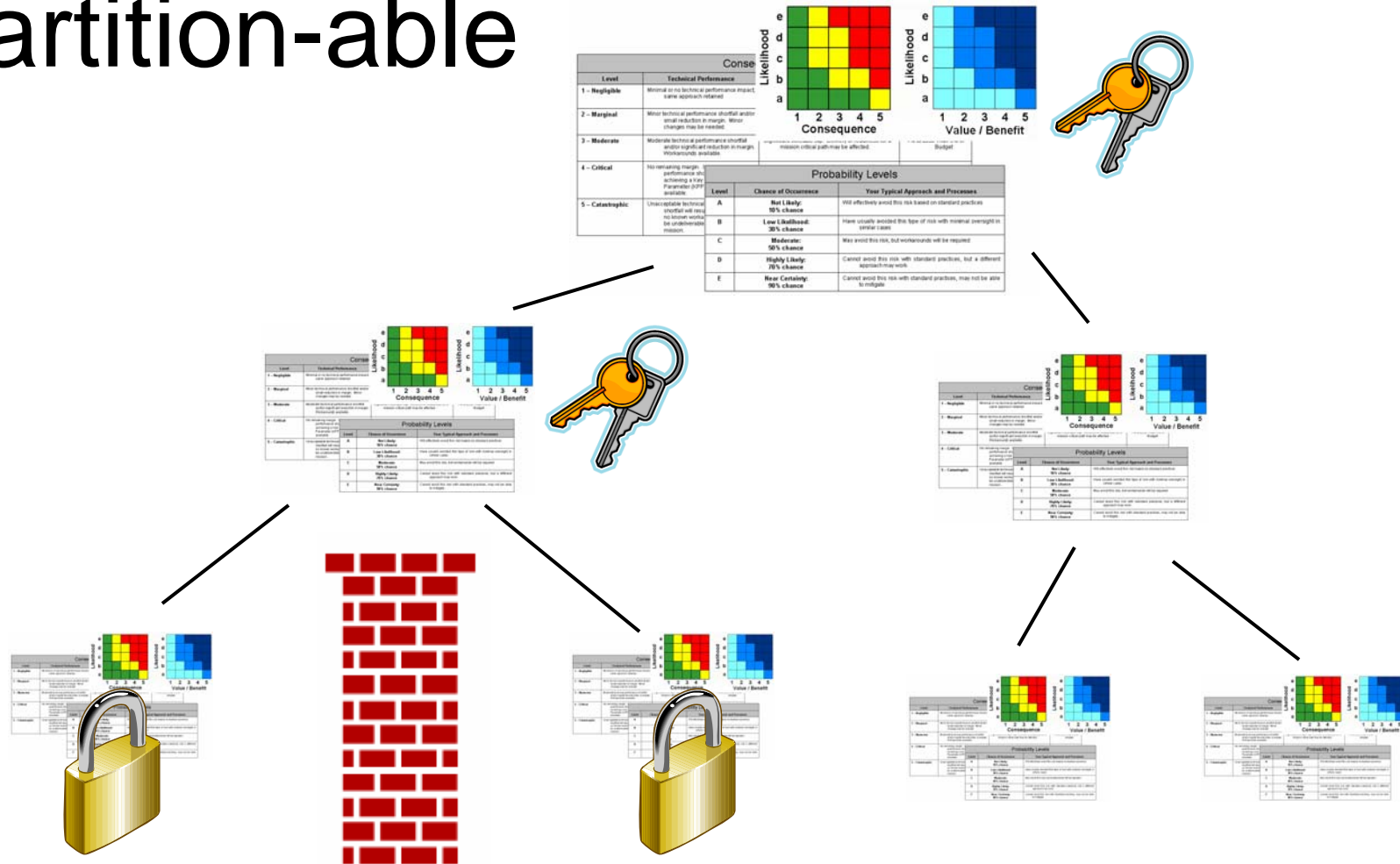
- For all levels of the organization
- Rolls up lower level risks
- Allows prioritization
- Gives visibility



Scalable

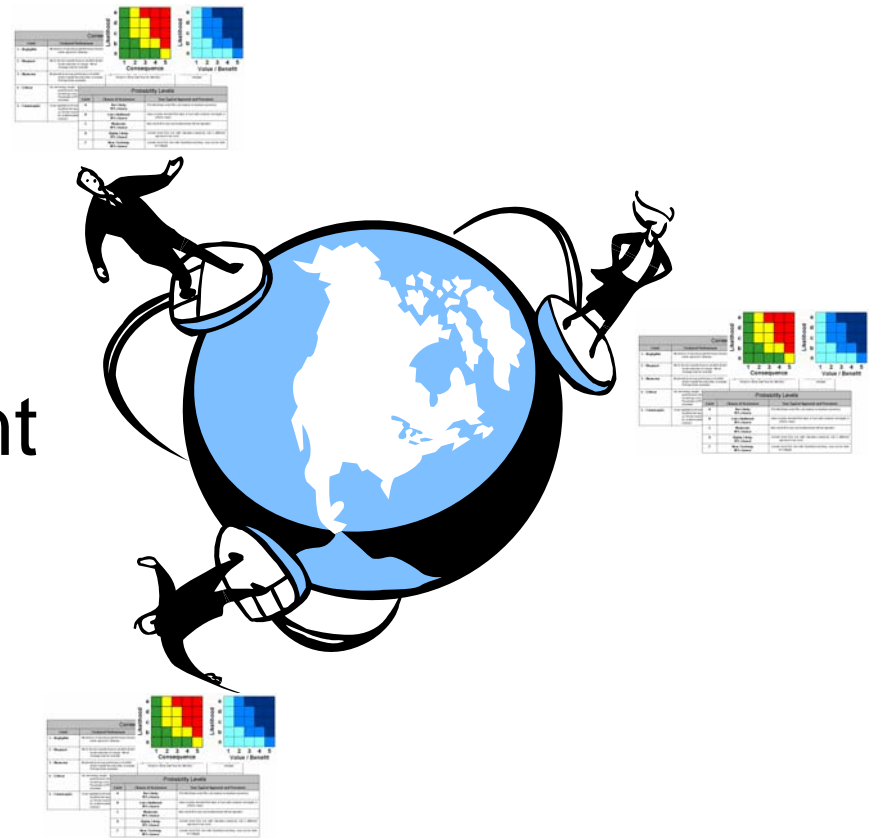


Partition-able



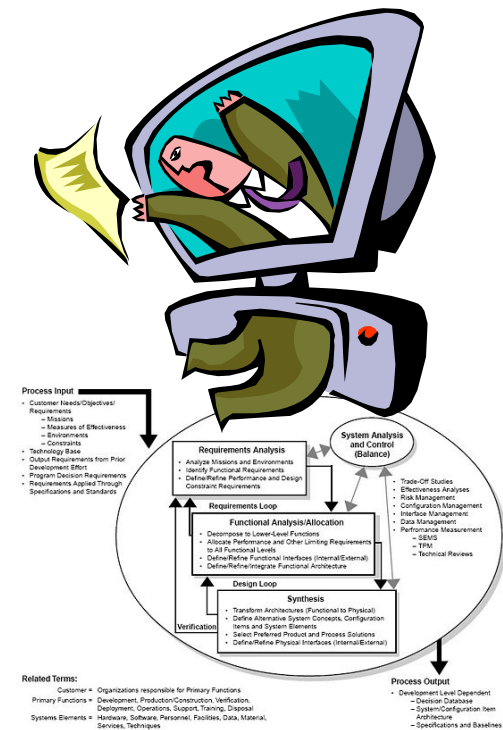
Accessible

- Multiple teams
- Multiple locations
- Customer involvement
- Real time data
- Available 24-7



Interface-able

- Interfaces with other Systems Engineering Processes
 - Requirements Management
 - Configuration Management
 - Verification and Test
- Interfaces with other Project Management Processes
 - Integrated Master Schedule
 - Earned Value Management



Common Tools

- Risk Register, Log, or Database
- CASE Tools
- Project Management Tools



Summary

Requirements for Team Collaboration :

- Sponsorship
- Common Language
- Common Process
- Scalable
- Partition-able
- Accessible
- Interface-able



Questions?

