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July 18 - 21, 2016

Assessing System Development Risks

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Overview

- Why projects fail
- Categories of risk
- Difficulty assessment
- Assigning resources
- Lessons Learned
- Example

Why do projects fail?

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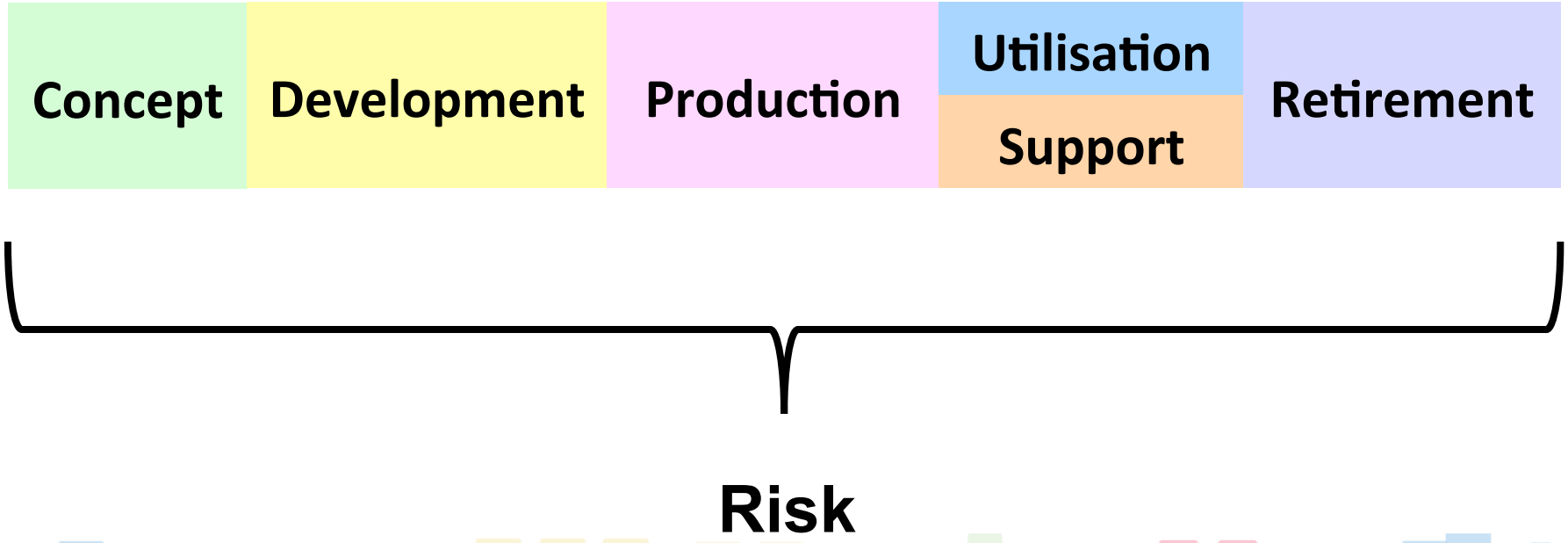
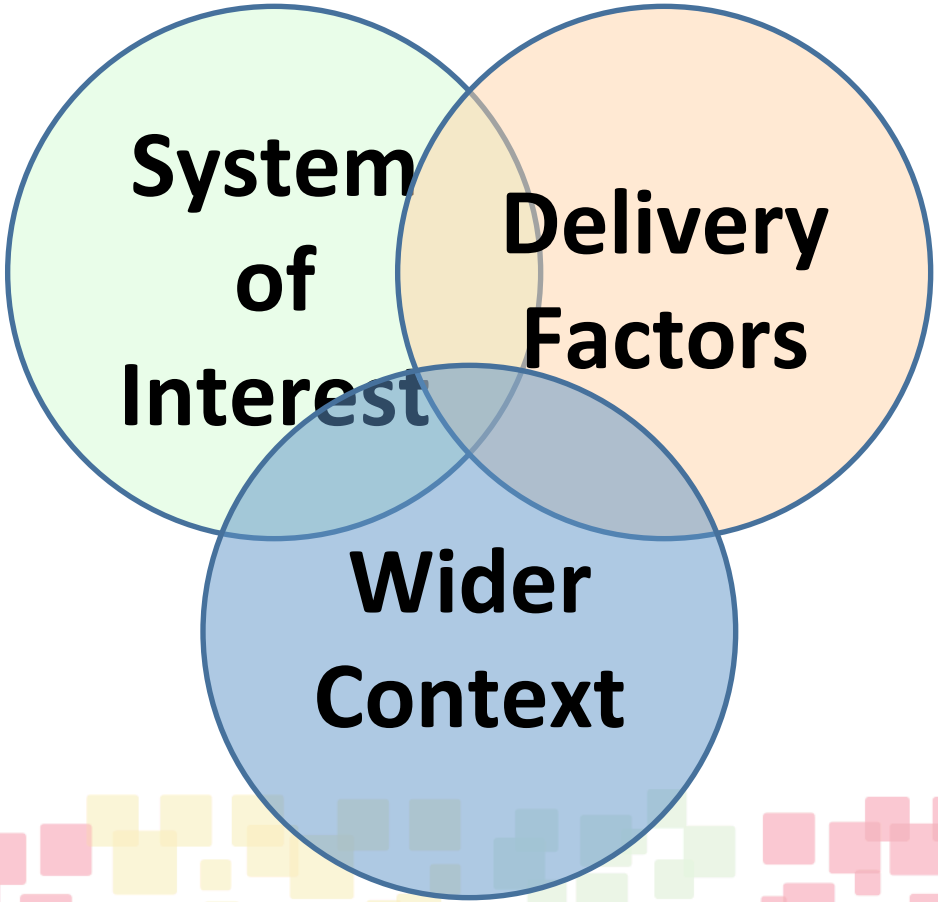
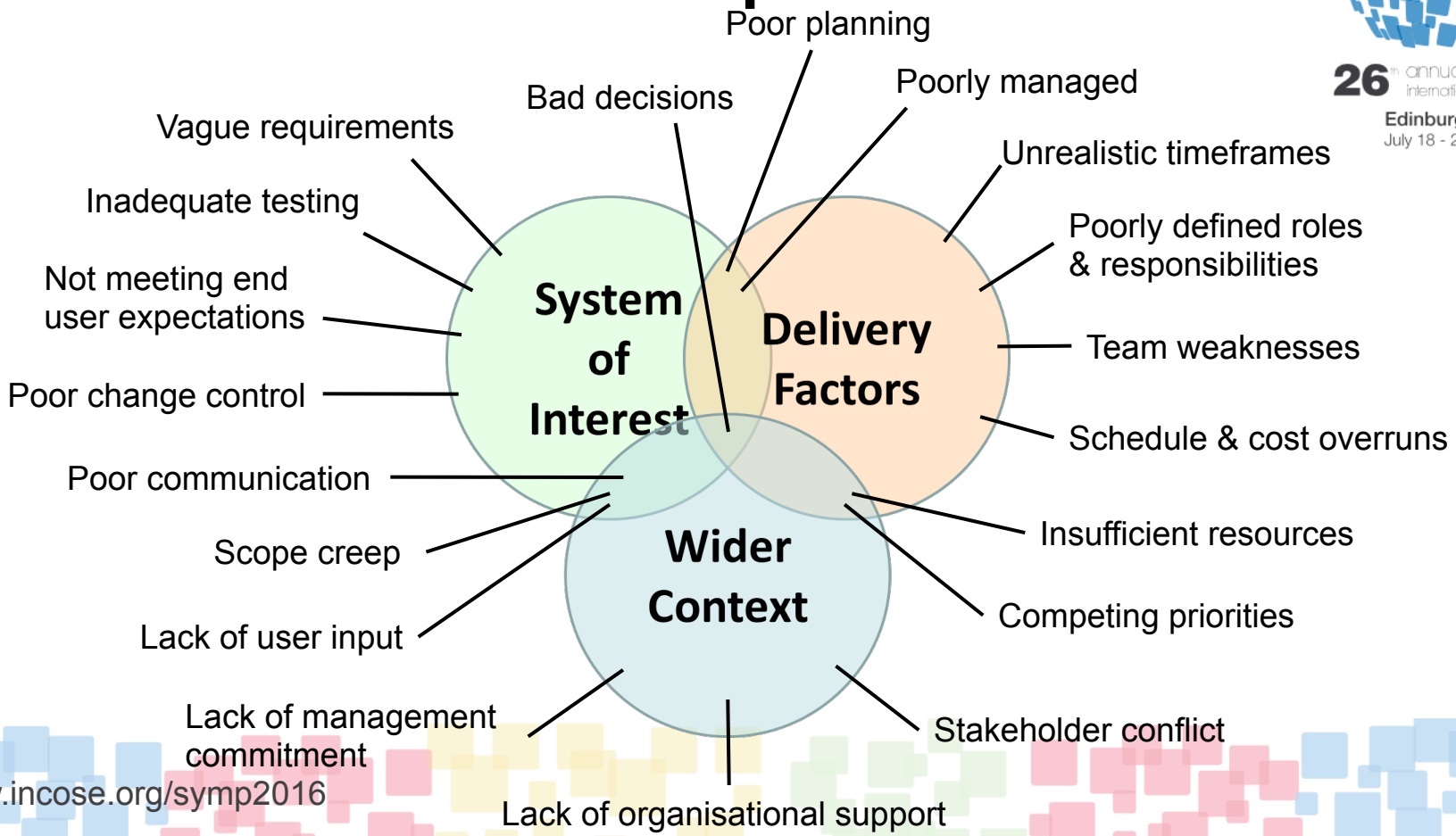


Categories of risk



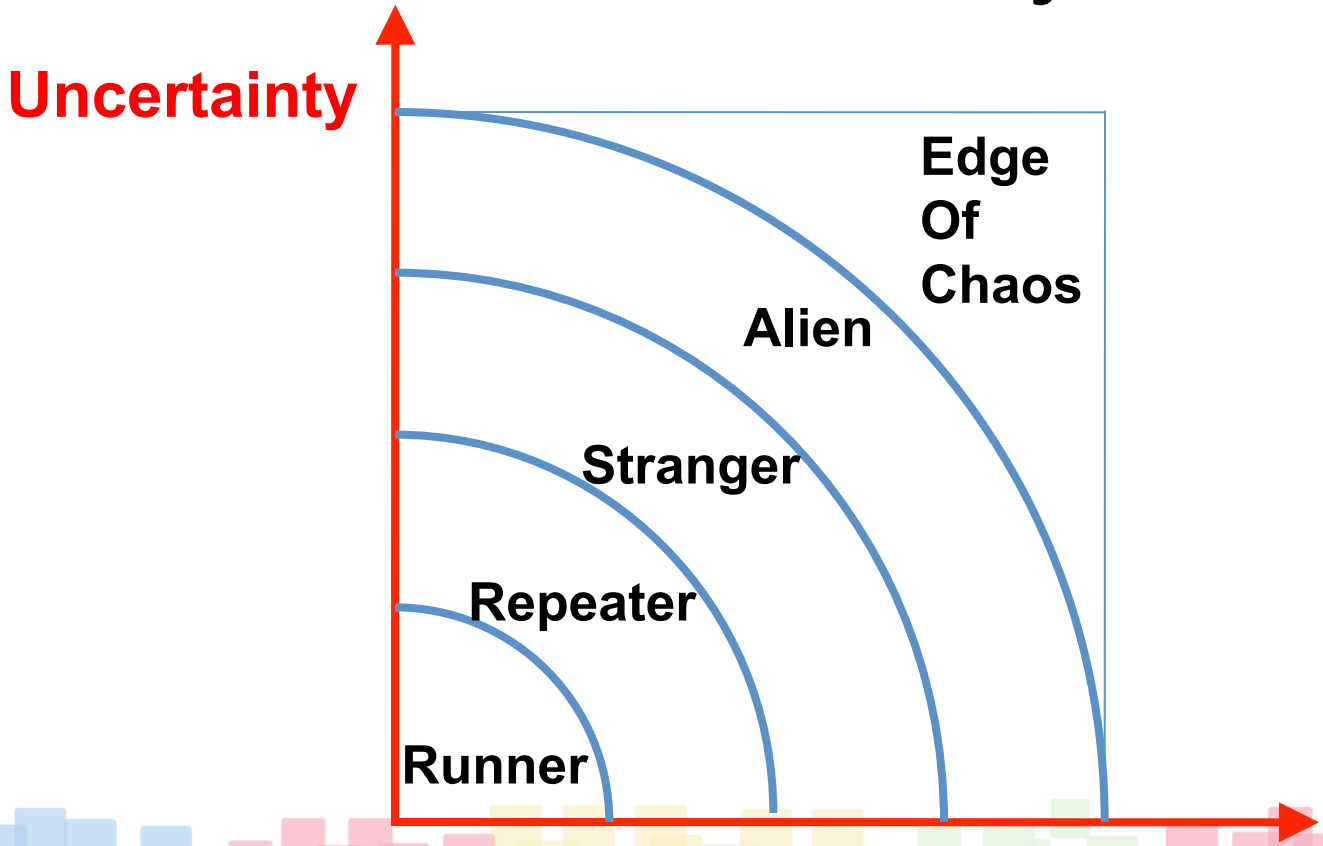
Risk examples



Difficulty assessment

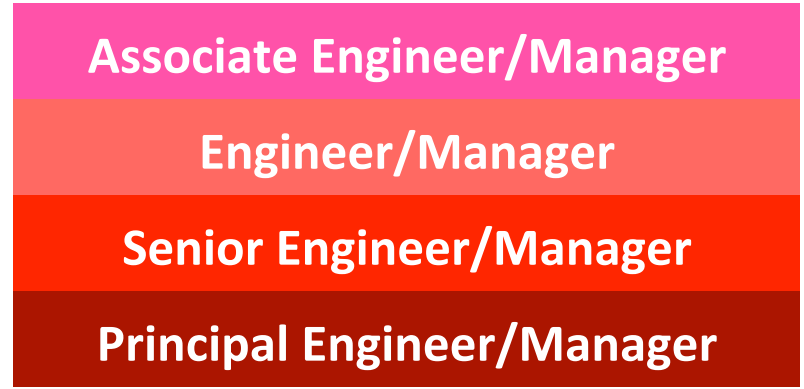
Category	Risk Area	Difficulty Level
System of Interest	Requirements uncertainty	1
	Architecture complexity	2
	Technology novelty	1
Delivery Factors	Cost	3
	Duration	3
	Team focus	4
Wider Context	Strategic importance	4
	Reputational risk	4
	Stakeholder commitment	3
	External interfaces	2

Overall difficulty



Team competence

- Project Manager
- System Engineer
- Technical Manager
- Senior Responsible Owner
- Specialist Engineers



Team Responsibilities

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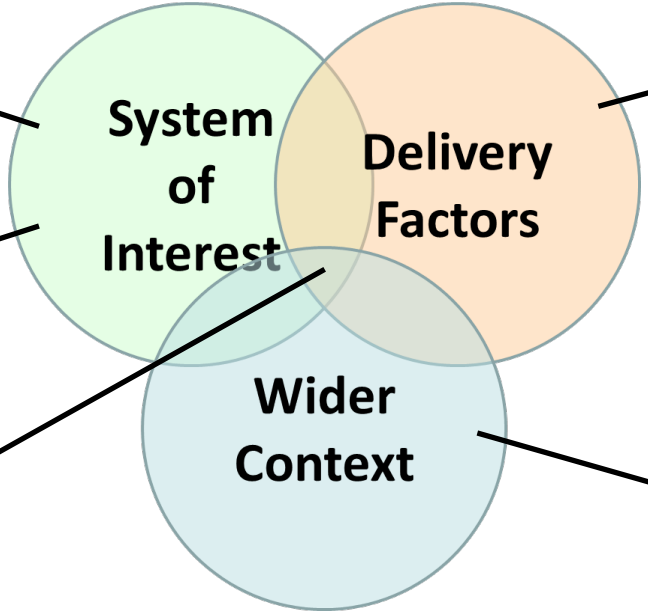
Technical Manager

Specialist Engineers

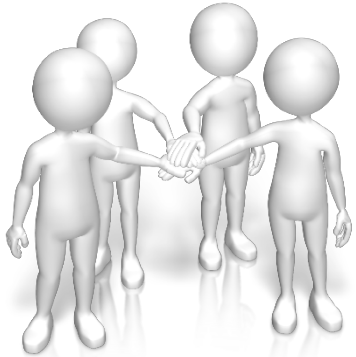
System Engineer

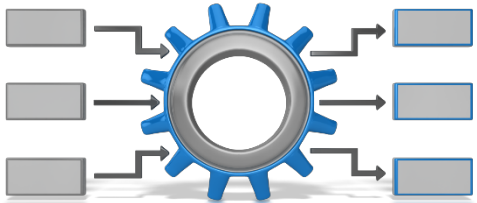


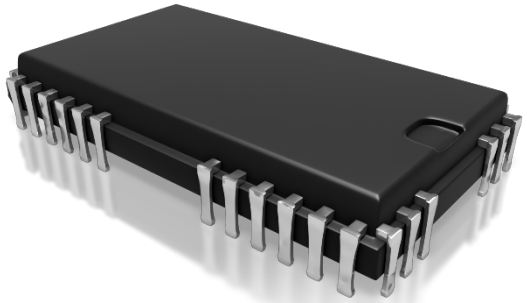
Project Manager

Senior Responsible Owner

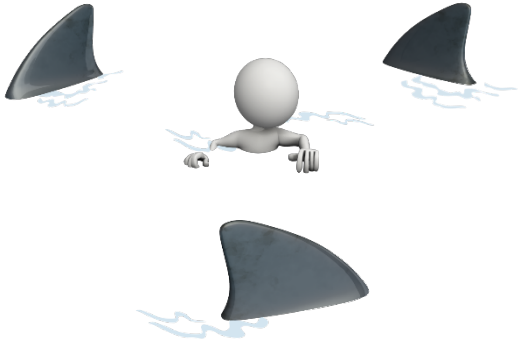
Project resources







Corporate governance



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Lessons Learned

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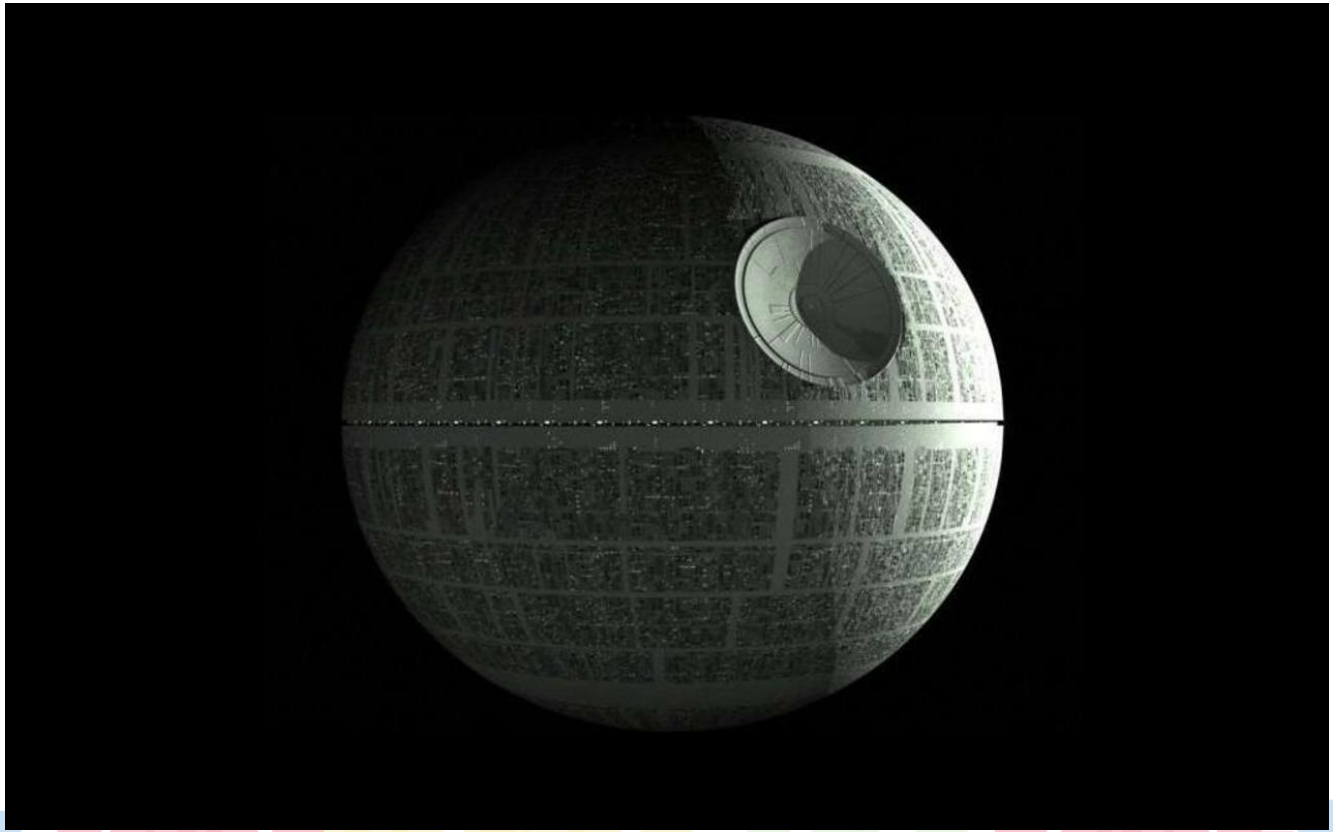
- Quality depends on assessor(s)
- Some risk areas more critical than others
- Assess several times during lifecycle
- Higher risk profile early in lifecycle
- Development of staff
- Organisational metrics

Example requirement

- Total Galactic Domination

System of interest



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Delivery factors

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Wider context

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Edge of chaos outcome

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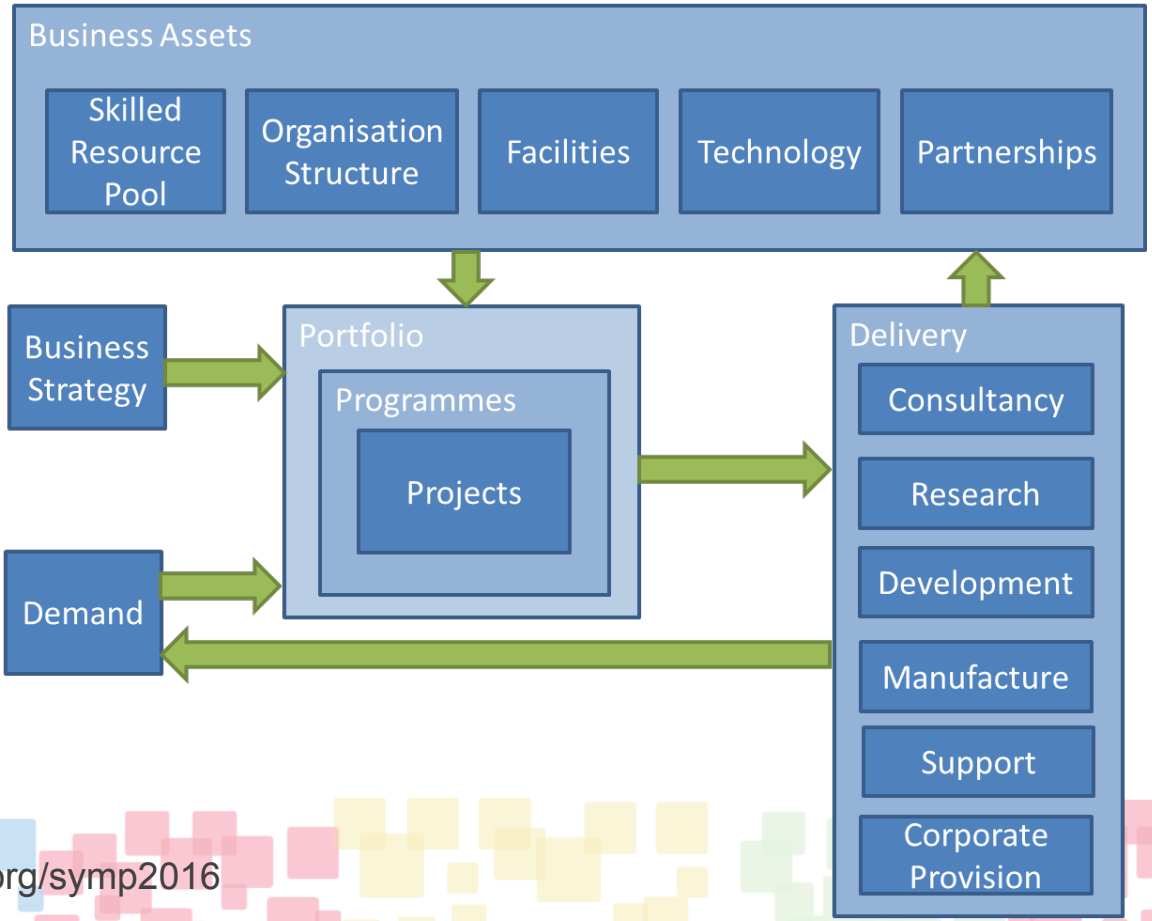
Example Operating Model



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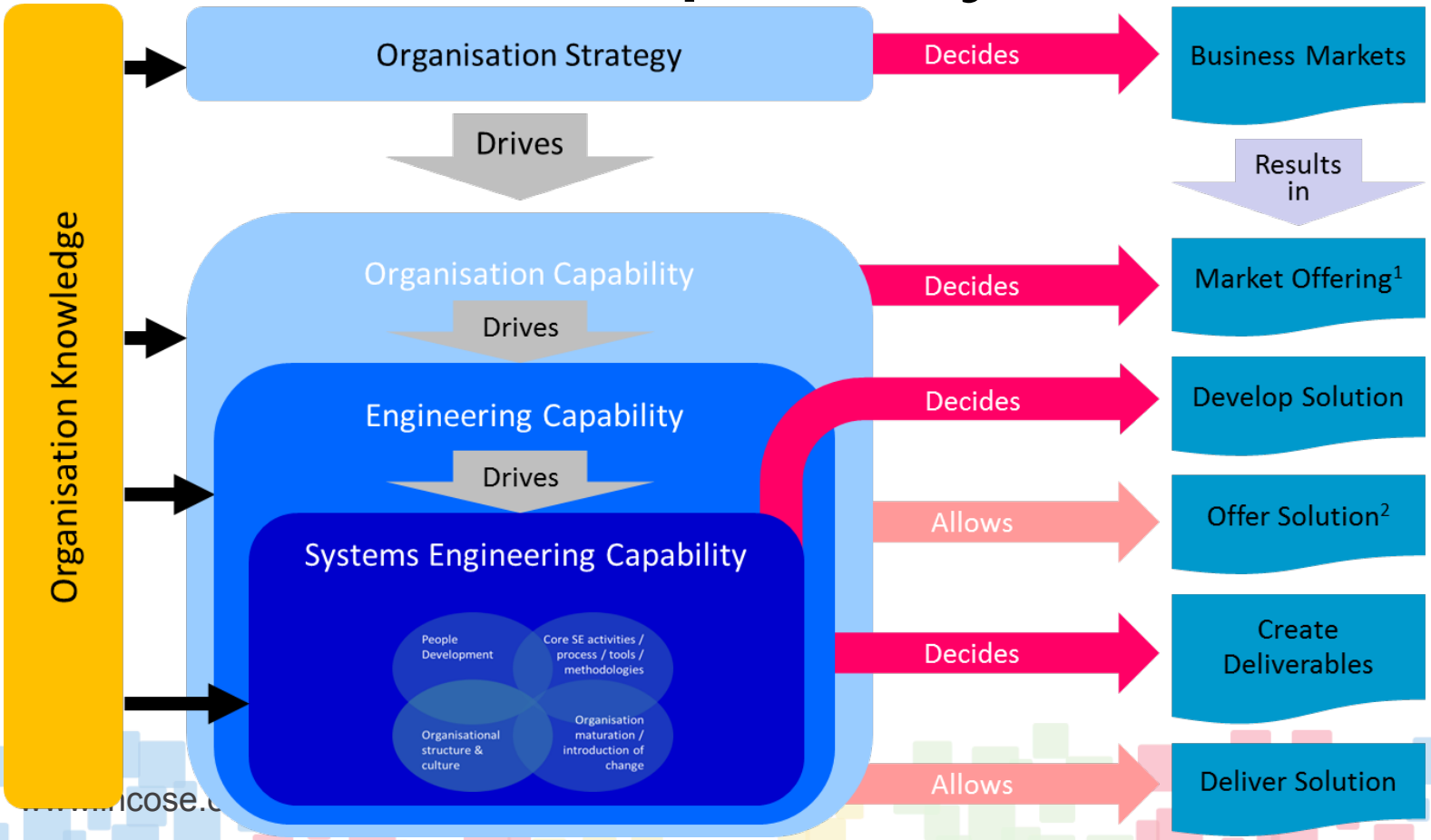
SE Capability



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