

PMI Darmstadt

08 June 2026

Hyves Project Research

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The background is a classical-style painting of a person, possibly a woman, falling or floating in a blue, ethereal space. The figure is positioned diagonally, with one arm raised and the other bent. The colors are soft and painterly, with a focus on the figure's form against the light blue background.

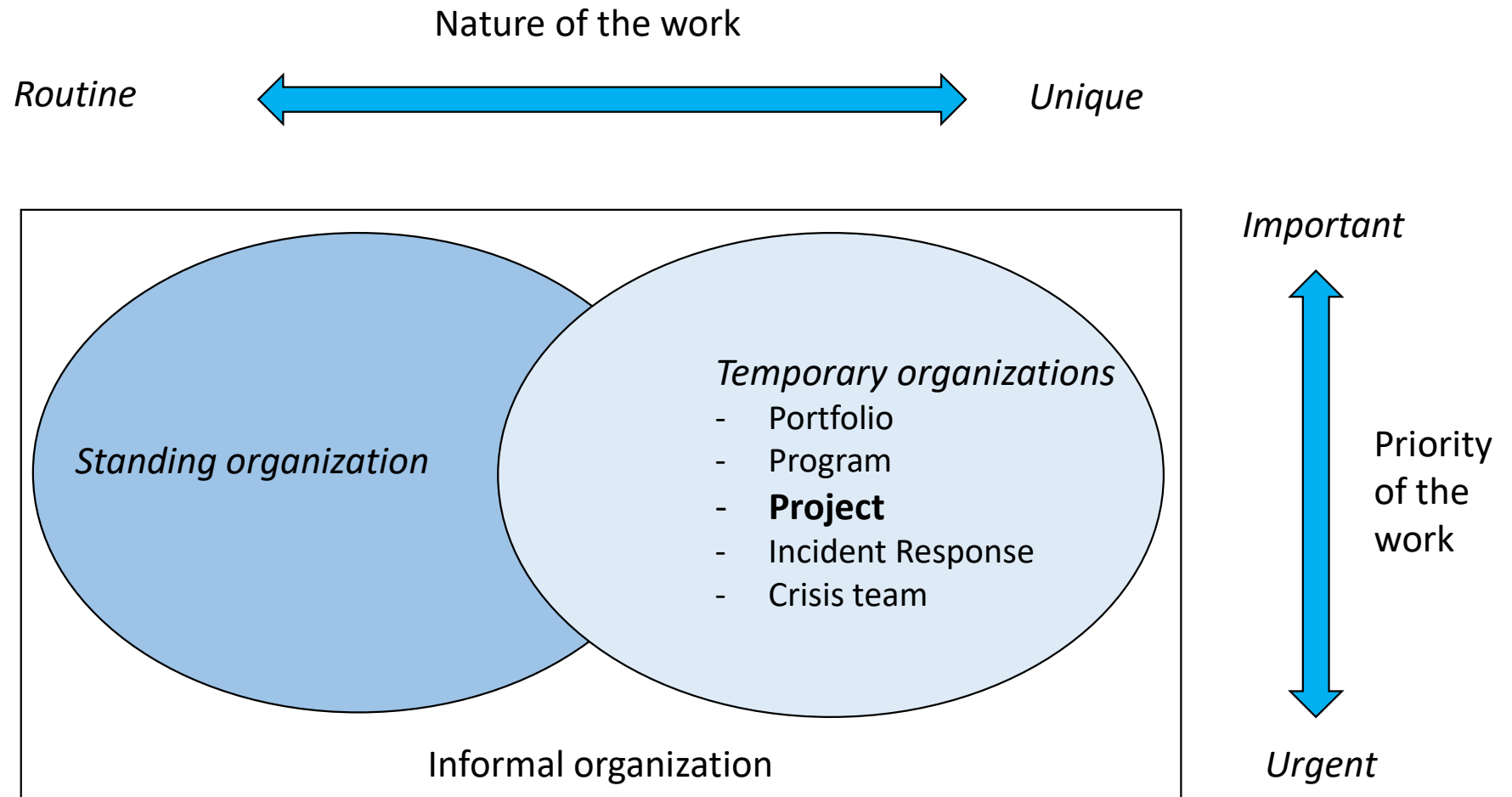
PMI

From risk to project uncertainty management

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Agenda

1. Introduction
2. Theory of uncertainty management
3. Practical uncertainty management techniques
4. Going forward



Importance

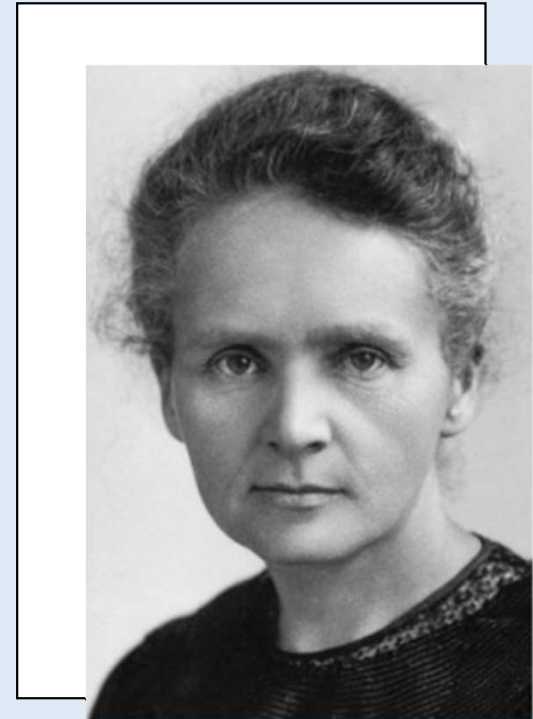


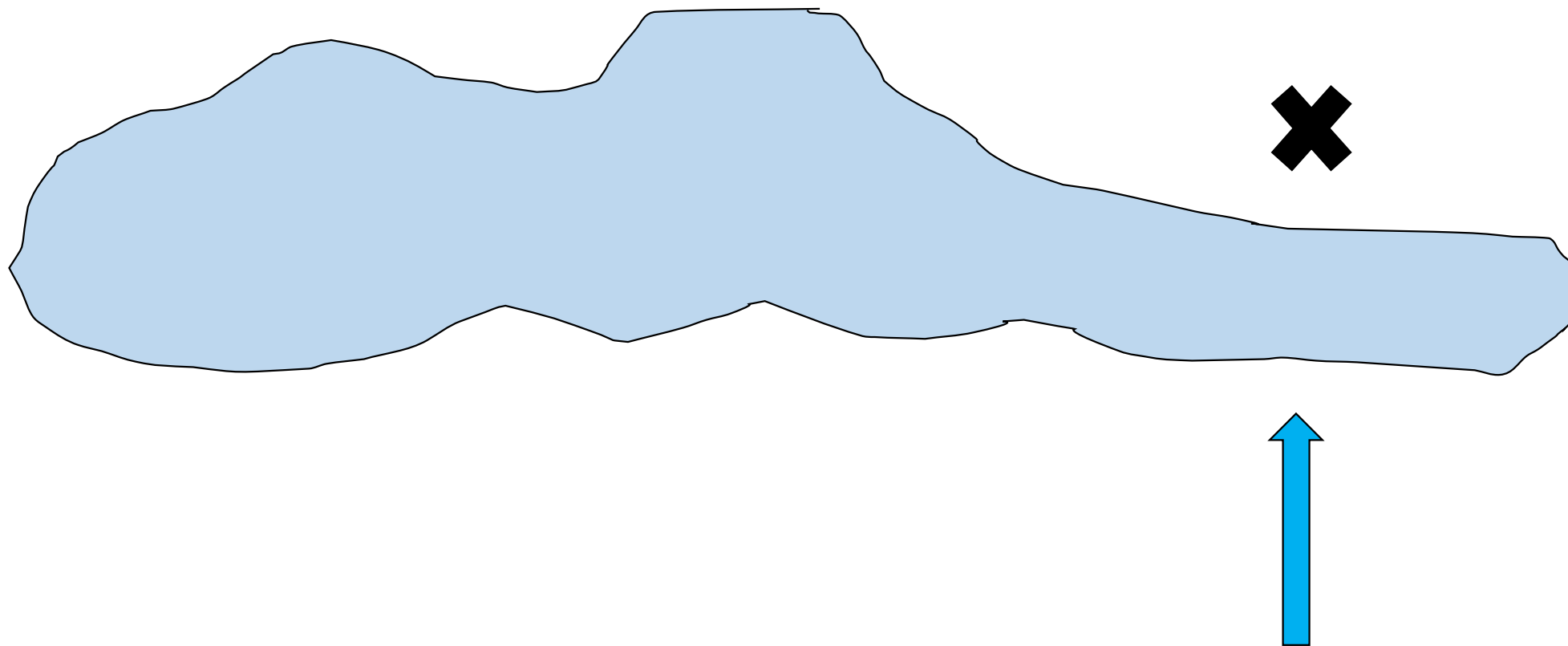
You cannot control what you cannot define

Poisonous versus radioactive

Velocity versus acceleration

Uncertainty versus risk





Failure

Risk

Shabby work

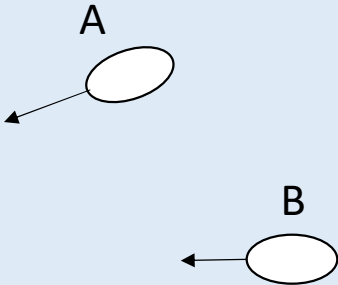
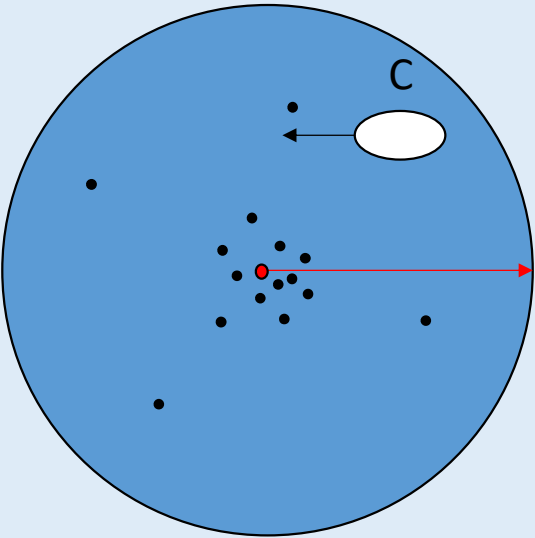
Unreliable estimates

Unrealistic planning

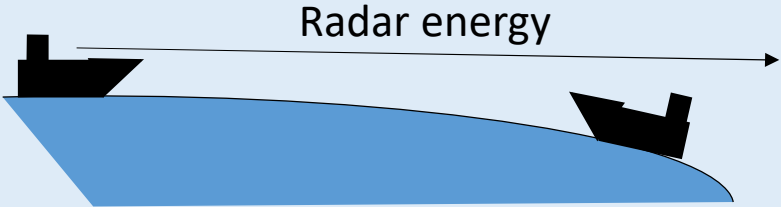
Missing information

Missing information

Top view



Side view



<i>Unaware</i>	Unknown-Known	Unknown-Unknown
<i>Aware</i>	Known-Known	Known-Unknown
	<u>Available</u>	<u>Unavailable</u>

Example: Decisions



Unaware	Unknown-Known	Unknown-Unknown
Aware	Known-Known	Known-Unknown
	<u>Available</u>	<u>Unavailable</u>

Example: Constraint



Unaware	Unknown-Known	Unknown-Unknown
Aware	Known-Known	Known-Unknown
	<u>Available</u>	<u>Unavailable</u>

Example: Risk



Unaware

Unknown-Known

Unknown-Unknown

Aware

Known-Known

Known-Unknown

Available

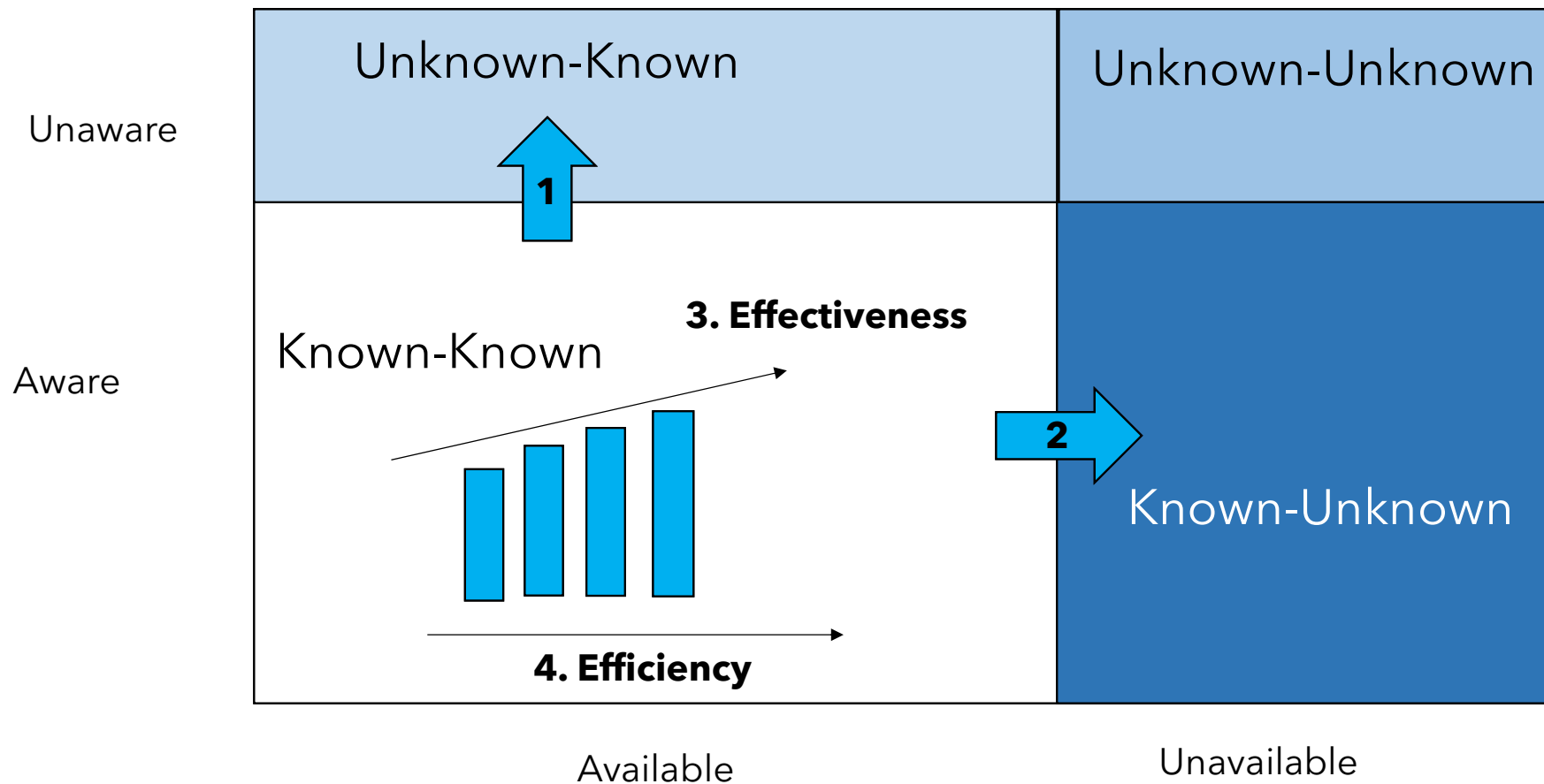
Unavailable

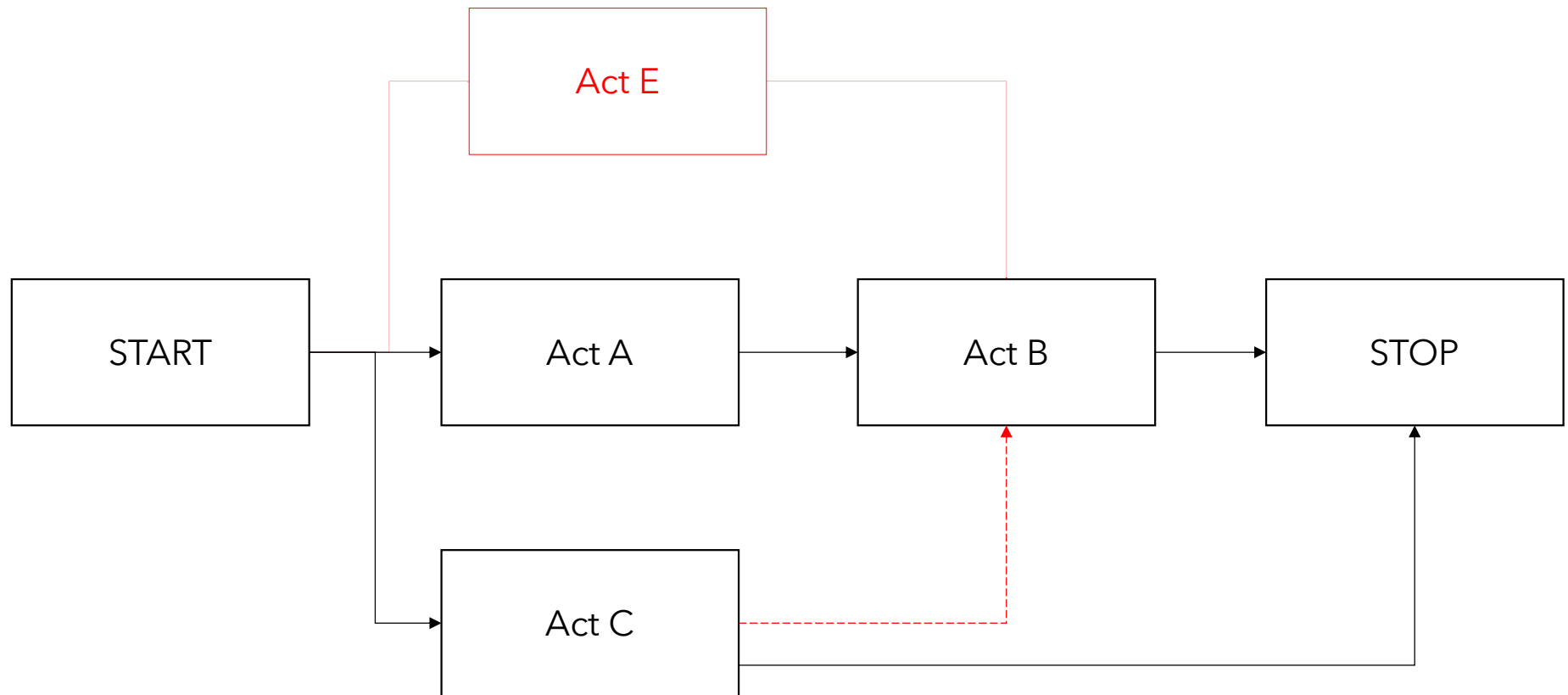
Example: Problem



<i>Unaware</i>	Unknown-Known	Unknown-Unknown
<i>Aware</i>	Known-Known	Known-Unknown
	<u>Available</u>	<u>Unavailable</u>

Uncertainty reduction strategies





Risk: What could potentially go wrong given the plan?

Uncertainty: What information are we not seeing causing the plan to fail?

Theory summary

1. Uncertainty matrix; generic definition
2. Uncertainty reduction strategies:
 - Raise information awareness
 - Increase information availability
 - Improve the effective use of information
 - Maximize information efficiency.

Q&A

?

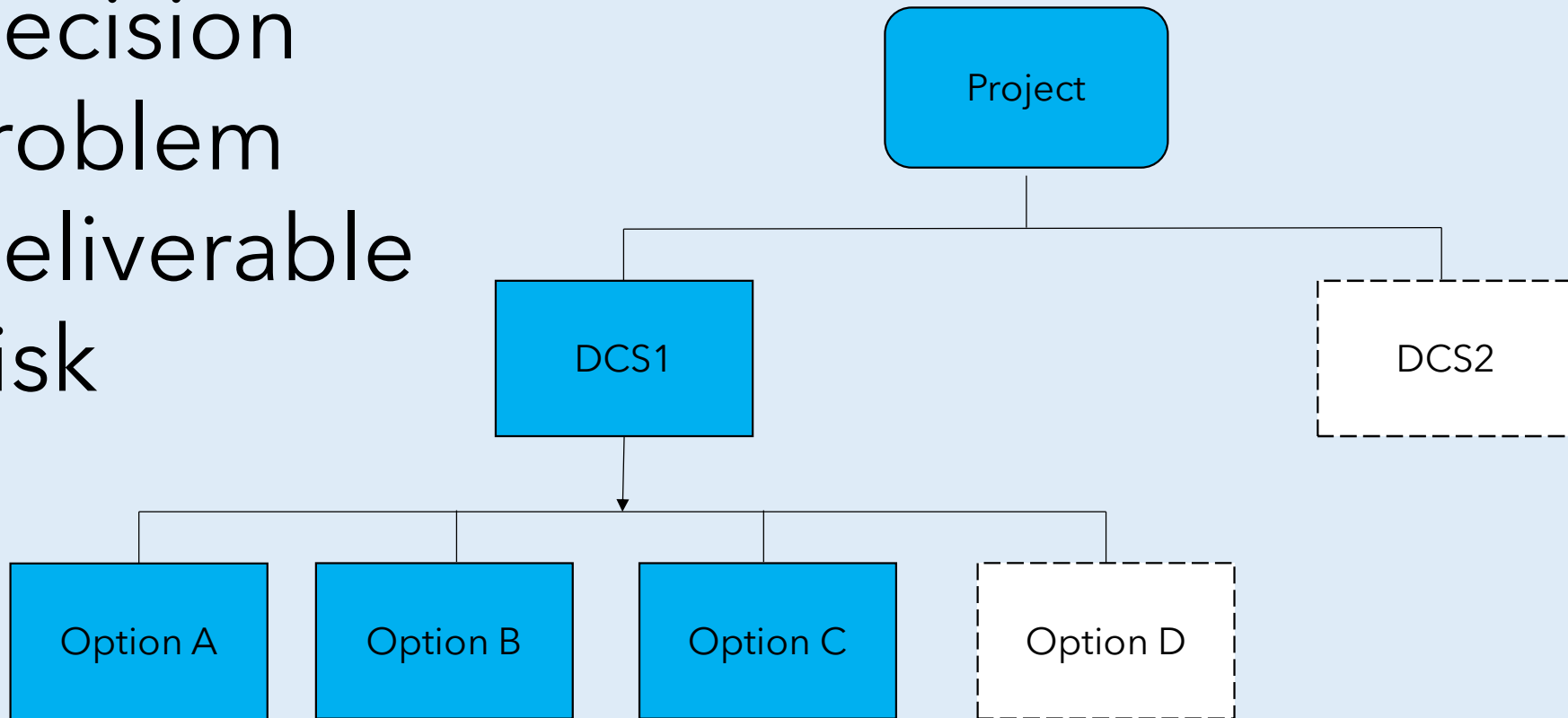
Part 2: Practice



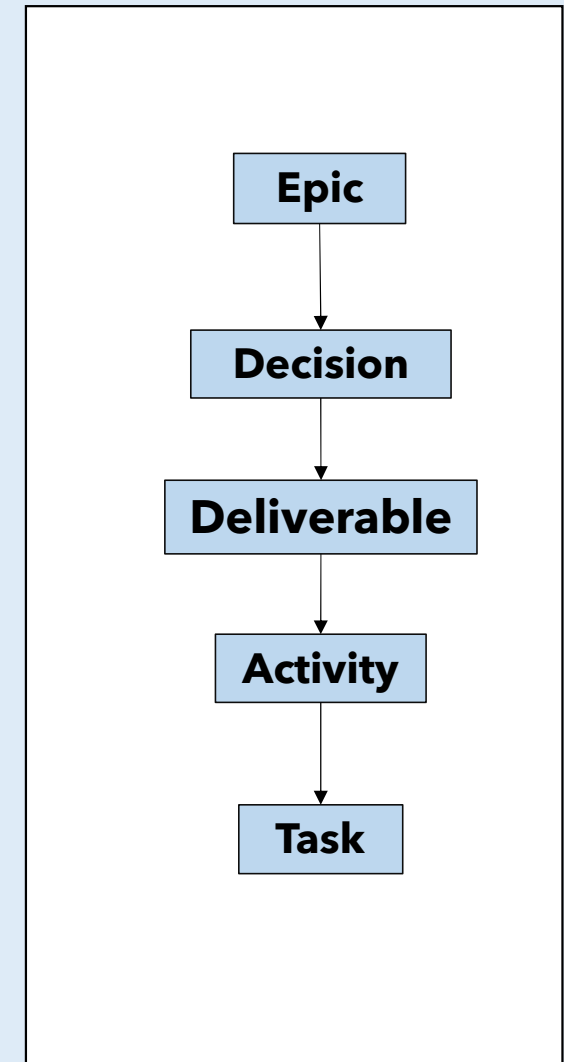


<https://www.youtube.com/watch?v=xNSgmm9FX2s>

Decision
Problem
Deliverable
Risk



Dream House Project



[Link](#)

Decision

- Description
- Urgent – Important
- Choices
- Global – Local
- Owner
- Latest point in time
- Stakeholders

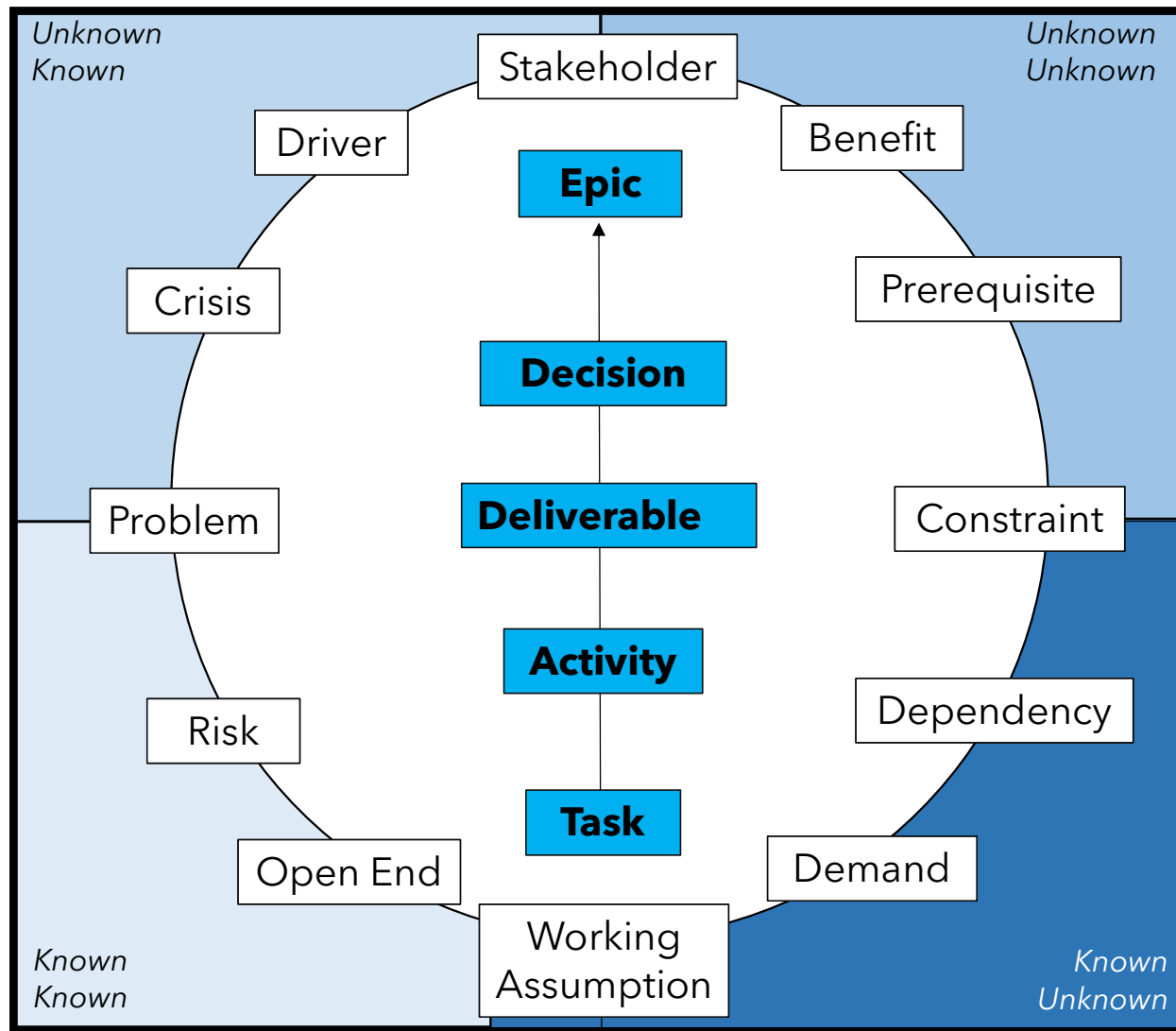
Deliverable

- Description
- Owner
- Requirements
- Fit criterion
- Status
- Cost

Activity

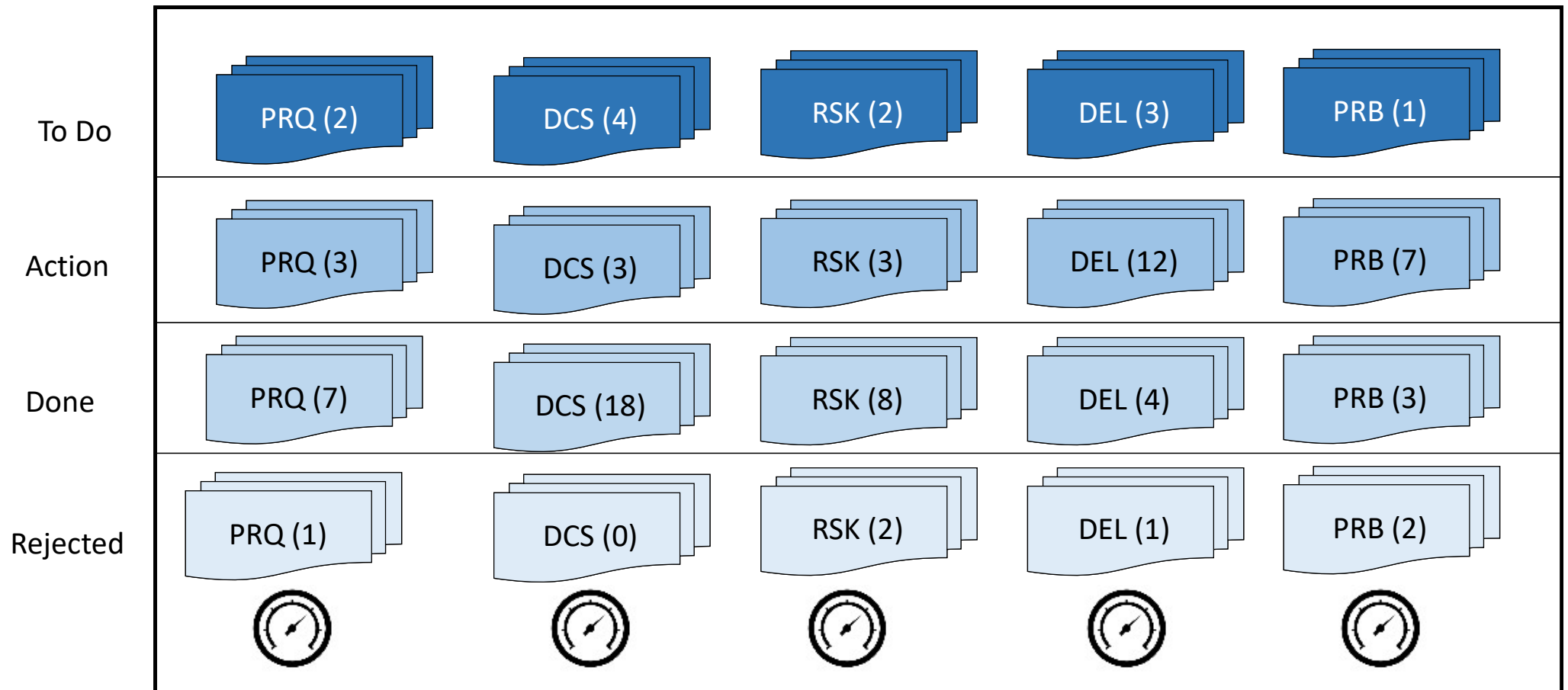
- Description
- Lead time
- Resources
- Status
- Dependencies



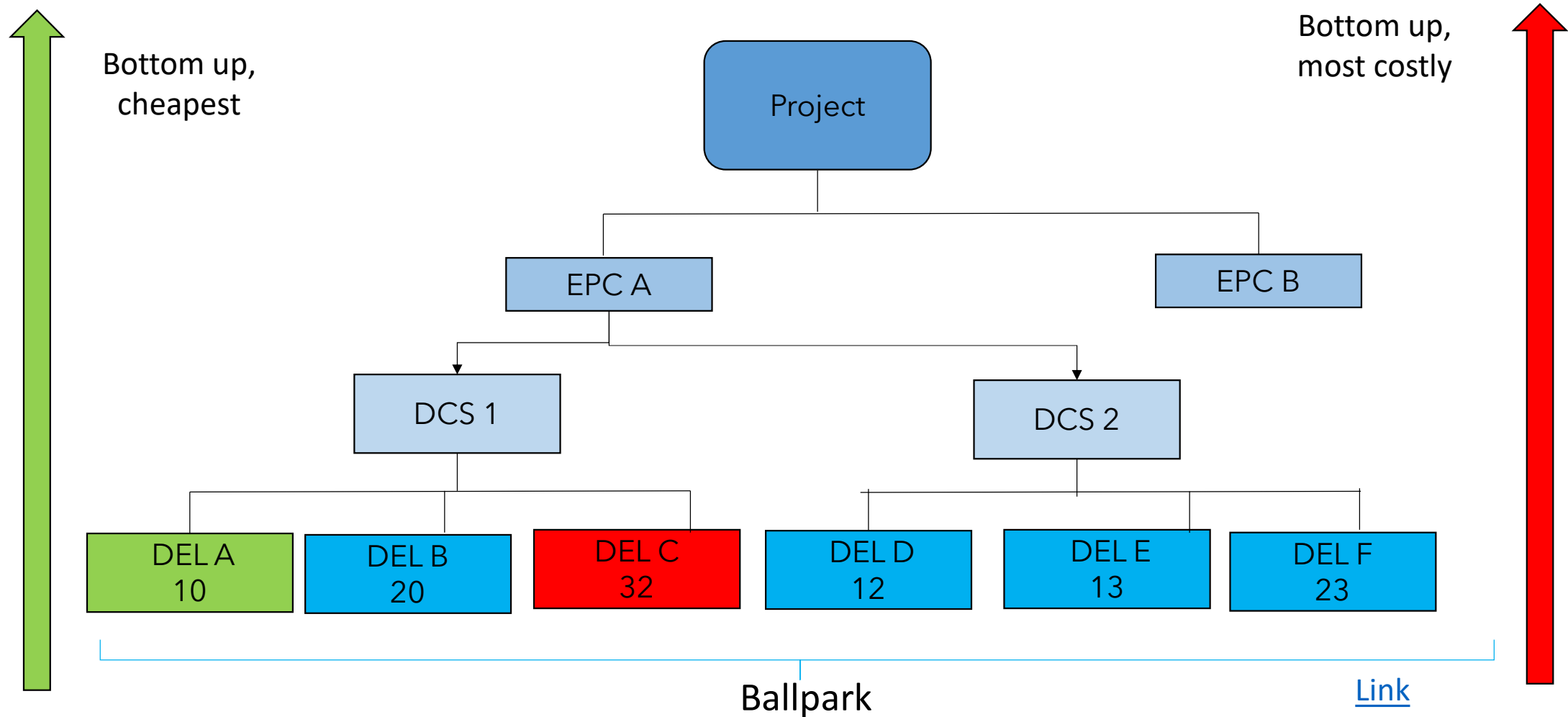


	Ambition	To do	Doing	Testing	Done	Target	Delivered
Workstream 1	EPC 1 House	DEL 1.3 The building	DCS 1.2 RSK 1.3 OED 1.1	TSK 1.2 TSK 1.3	TSK 1.1 DCS 1.1	DEL 1.2 Design	DEL 1.1 Requirements
Workstream 2	EPC 2 Garage	DCS 2.1 DEL 2.1 PRQ 2.1			DCS 2.2		
Workstream 3	EPC 3 Pool EPC 4 Green house	DCS 3.1 DEL 3.1 DEL 4.1					

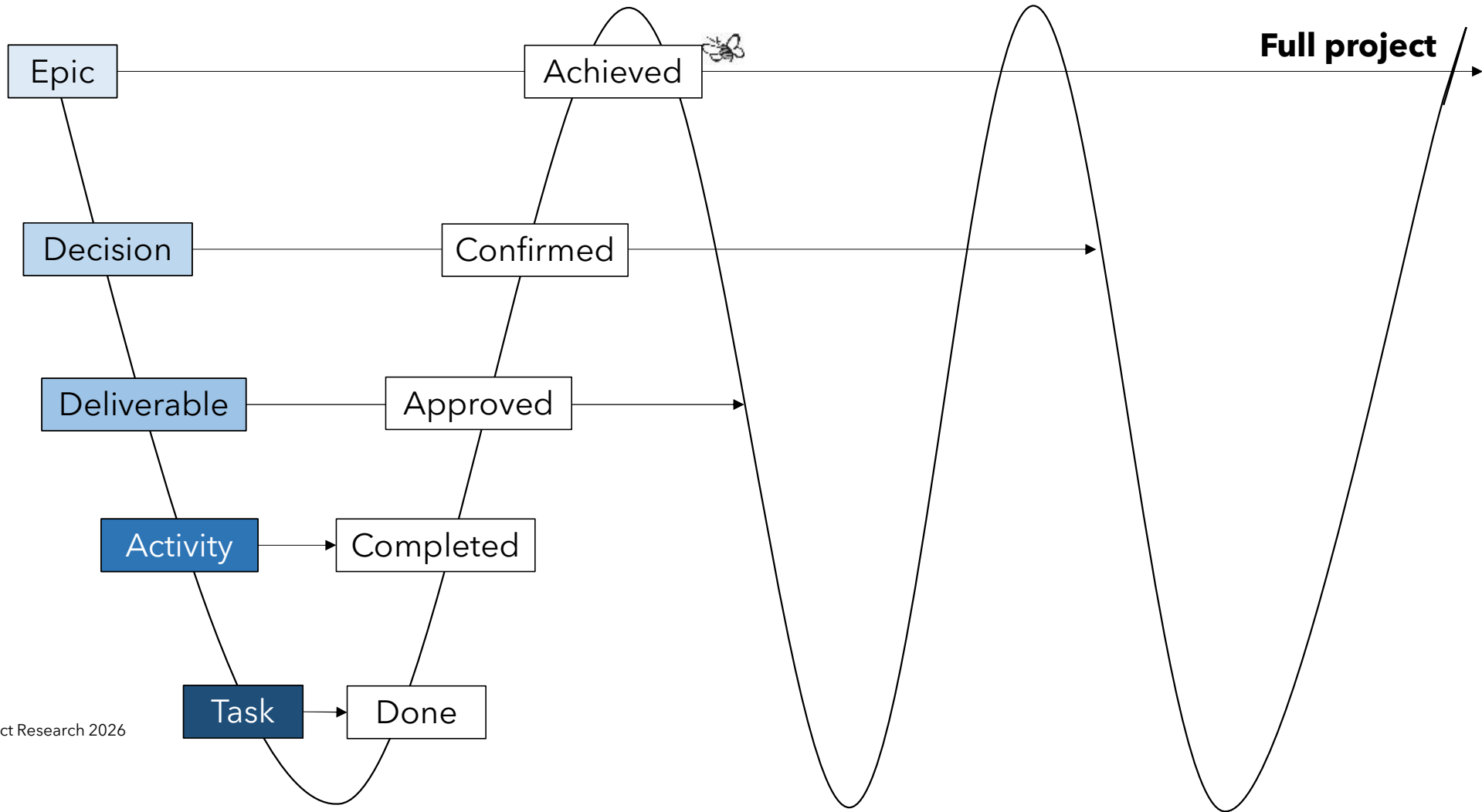
Power Kanban –KPI's

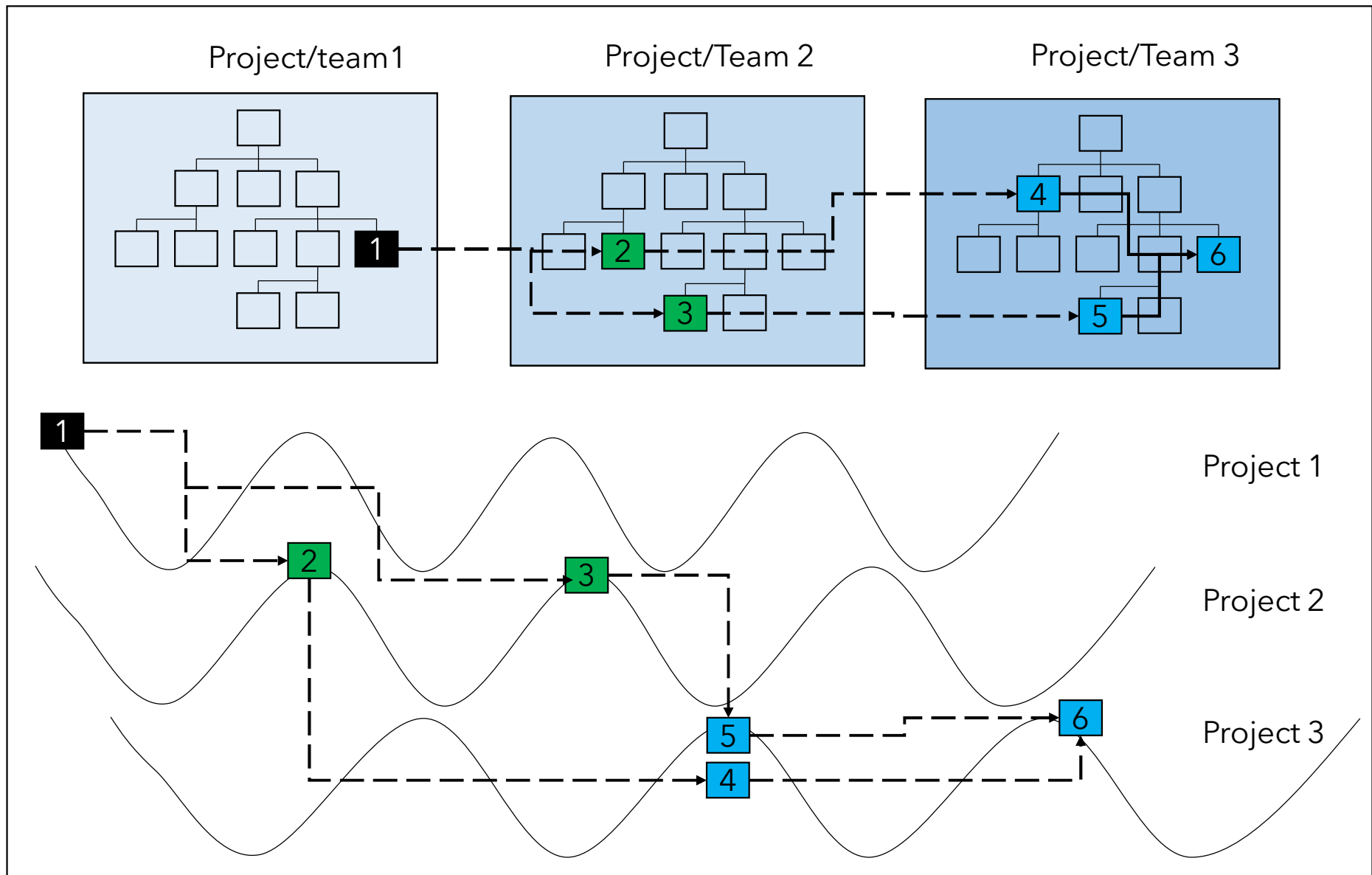


Result Breakdown Structure



Agile Rolling Wave Planning





Jan Mar Apr May June July Aug Sep Oct Nov

EPC
Renewable Energy

EPC
Pool

EPC
Green House

EPC
Off grid

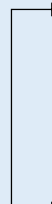
EPC
Off grid

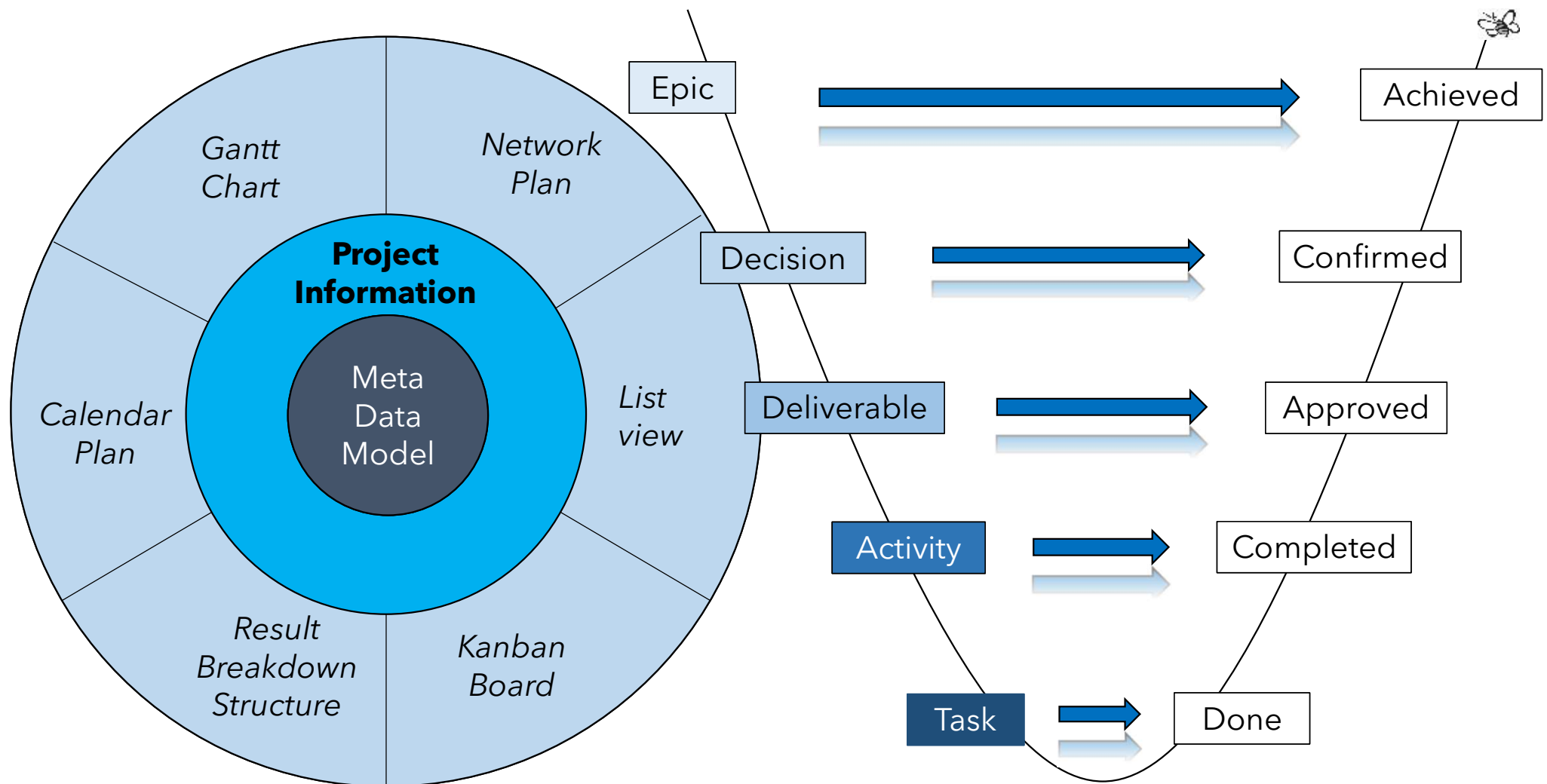
Start

EPC
Renewable energy

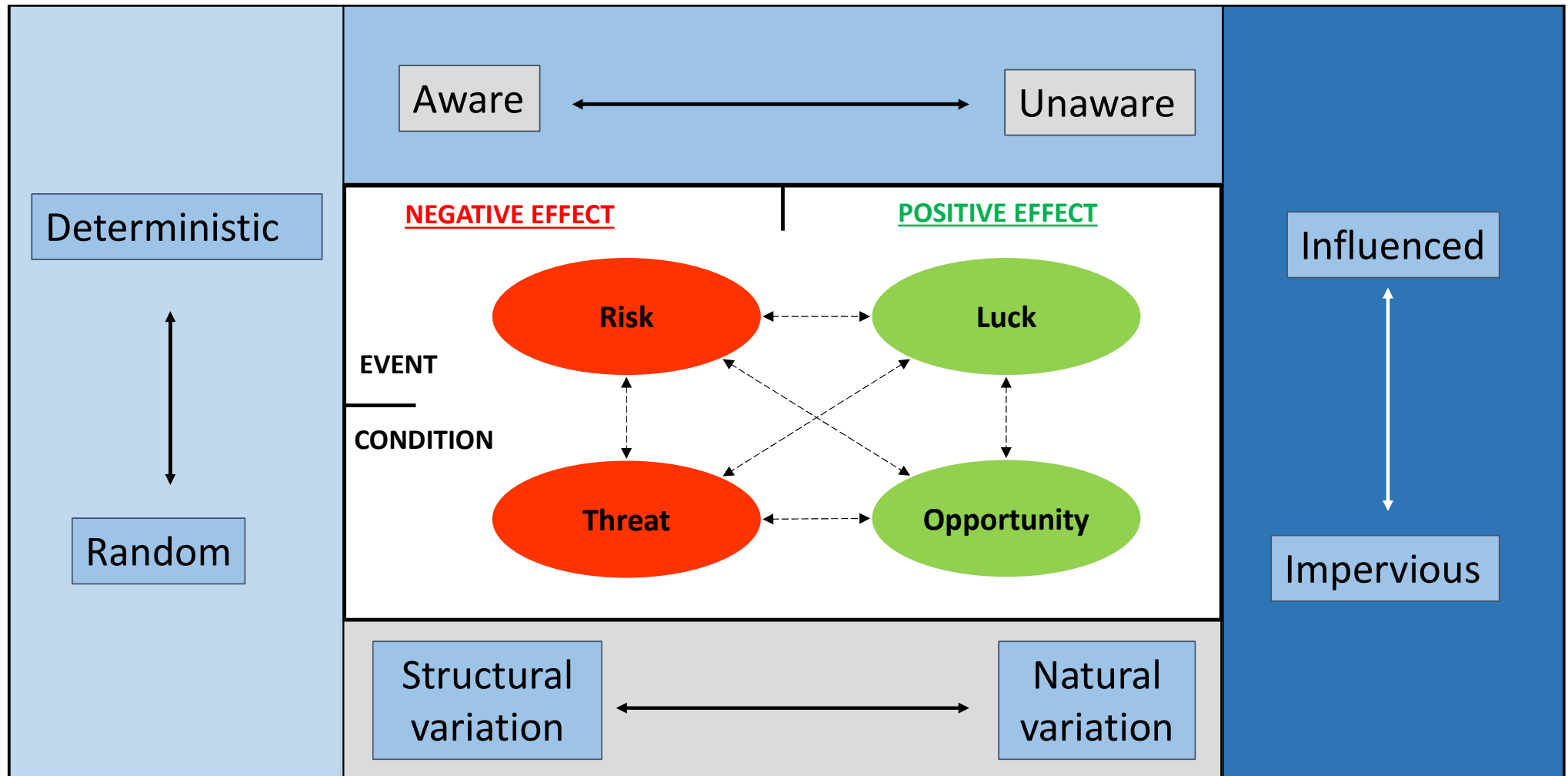
EPC
Green House

EPC
Pool





Risk evaluation



Risk-problem-crisis continuum



1. Secure stage



2. Risk stage



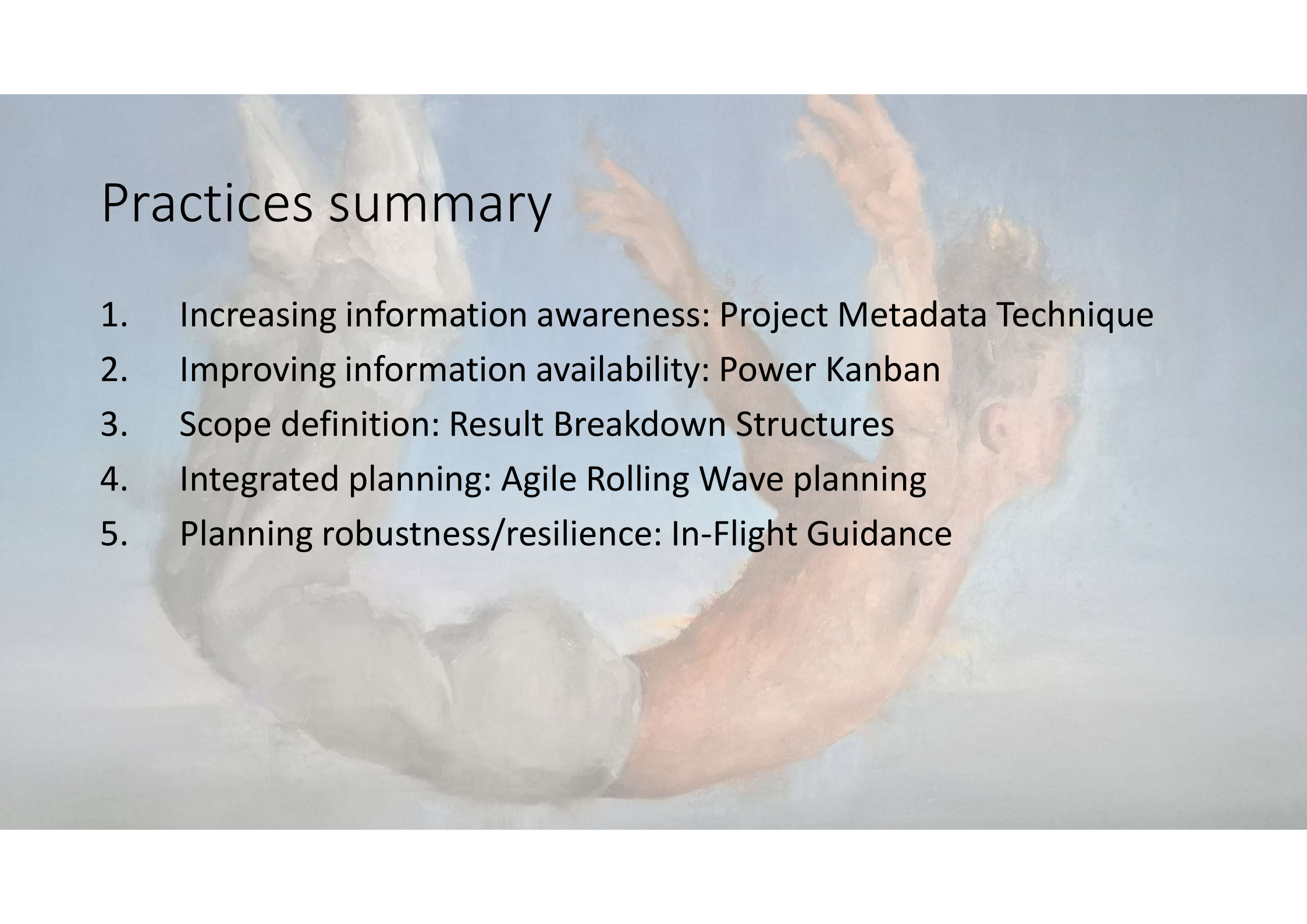
3. Problem stage



4. Crisis stage

Risk	Problem	Crisis
Pre-emptive Measures	Counter Measures	Contingency Measures
• Accept • Avoid • Mitigate • Transfer	• Absolve • Resolve • Solve • Dissolve	• Endure • Reduce • Continuity • Rebuild

Pre-emptive measures	Countermeasures	Contingency measures
N	N	N
Y	N	N
Y	Y	N
N	N	Y
Y	N	Y
N	Y	Y
N	Y	N
Y	Y	Y

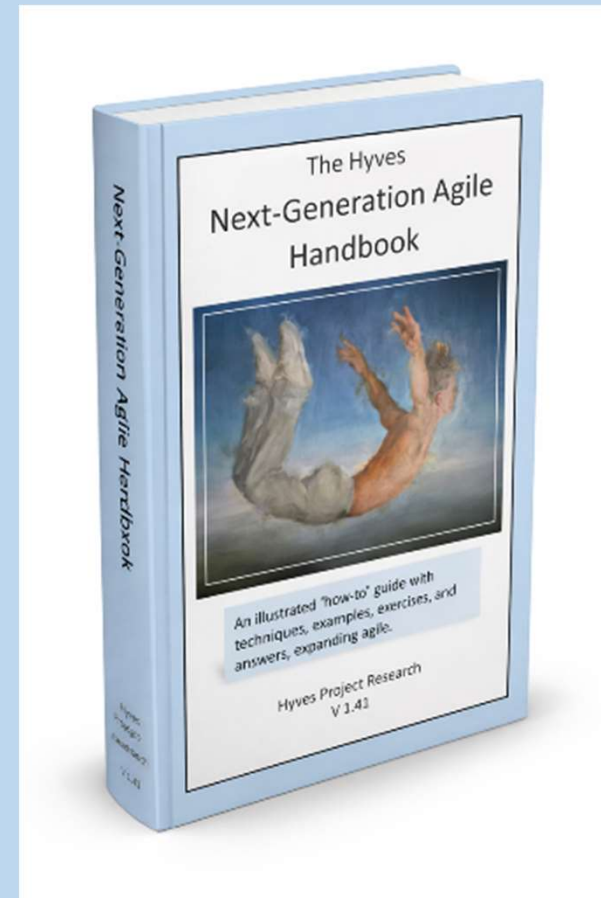


Practices summary

1. Increasing information awareness: Project Metadata Technique
2. Improving information availability: Power Kanban
3. Scope definition: Result Breakdown Structures
4. Integrated planning: Agile Rolling Wave planning
5. Planning robustness/resilience: In-Flight Guidance

Way ahead:

- Connect on LinkedIn
- Download the handbook
- Become an early adopter
- Any review is appreciated!



Discount code:
PMIDE

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