Scrum and Risk

Redefining the Traditional View of Risk,

Mark Summers

Story Map of this Session

Product Owner

Project Manager

Agilist

Executive

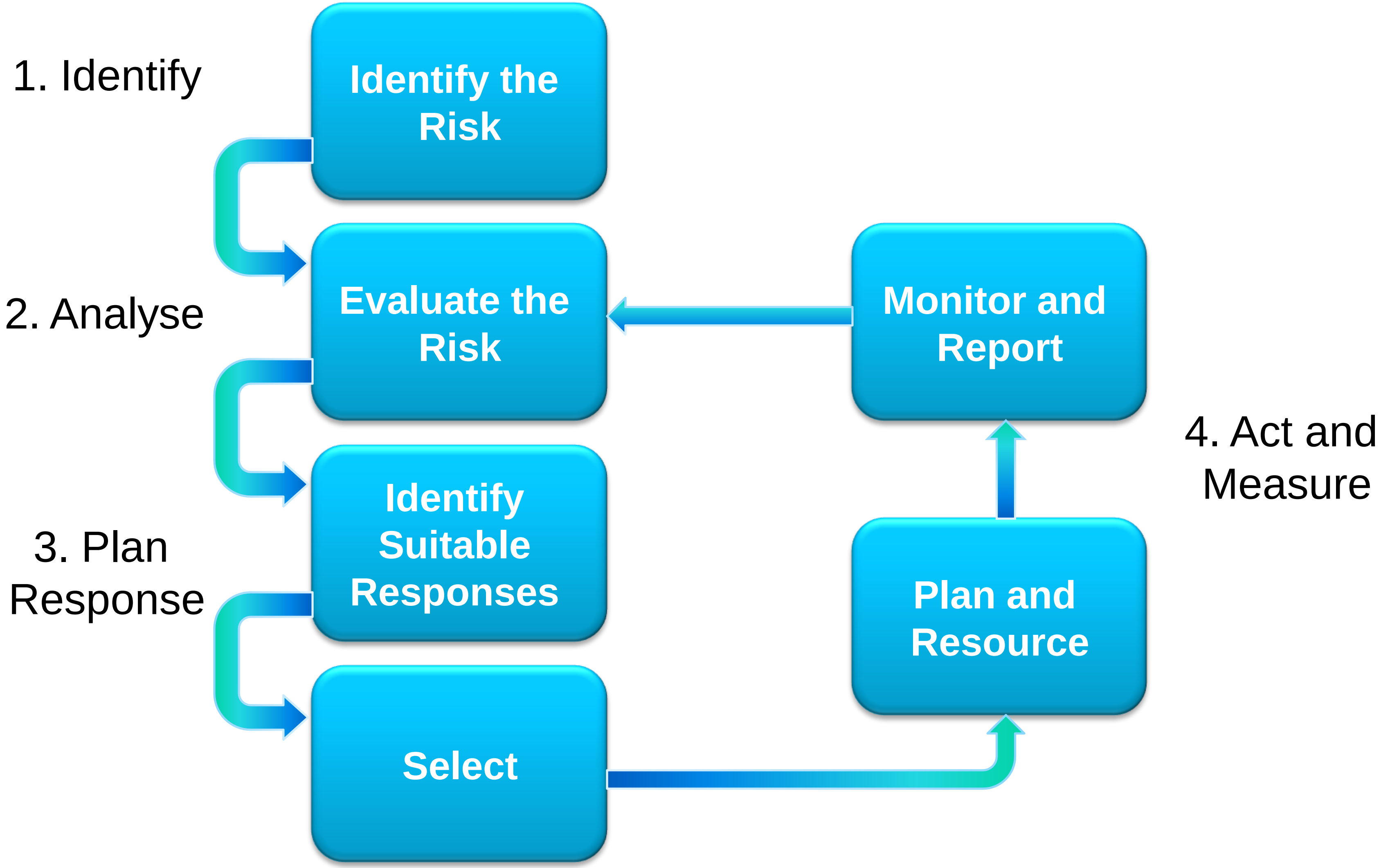
Introduction	How?	Why?	What?	When?	Who?	Close
About me	Mitigate Risks In Scrum	Risk Management	The risks	Deal with risk	Responsibility	Key take away
Definition	Existing RM practices	RM in Scrum				
	Visibility					
	Product Owner and risk					

Risk is uncertainty,

the difference between the expected and actual outcome

Risk Management is the activity by which we manage a project's exposure to Risk

Risk Management Cycle (Prince2)



1. Identify

Identify the Risk

2. Analyse

Evaluate the Risk

3. Plan Response

Identify Suitable Responses

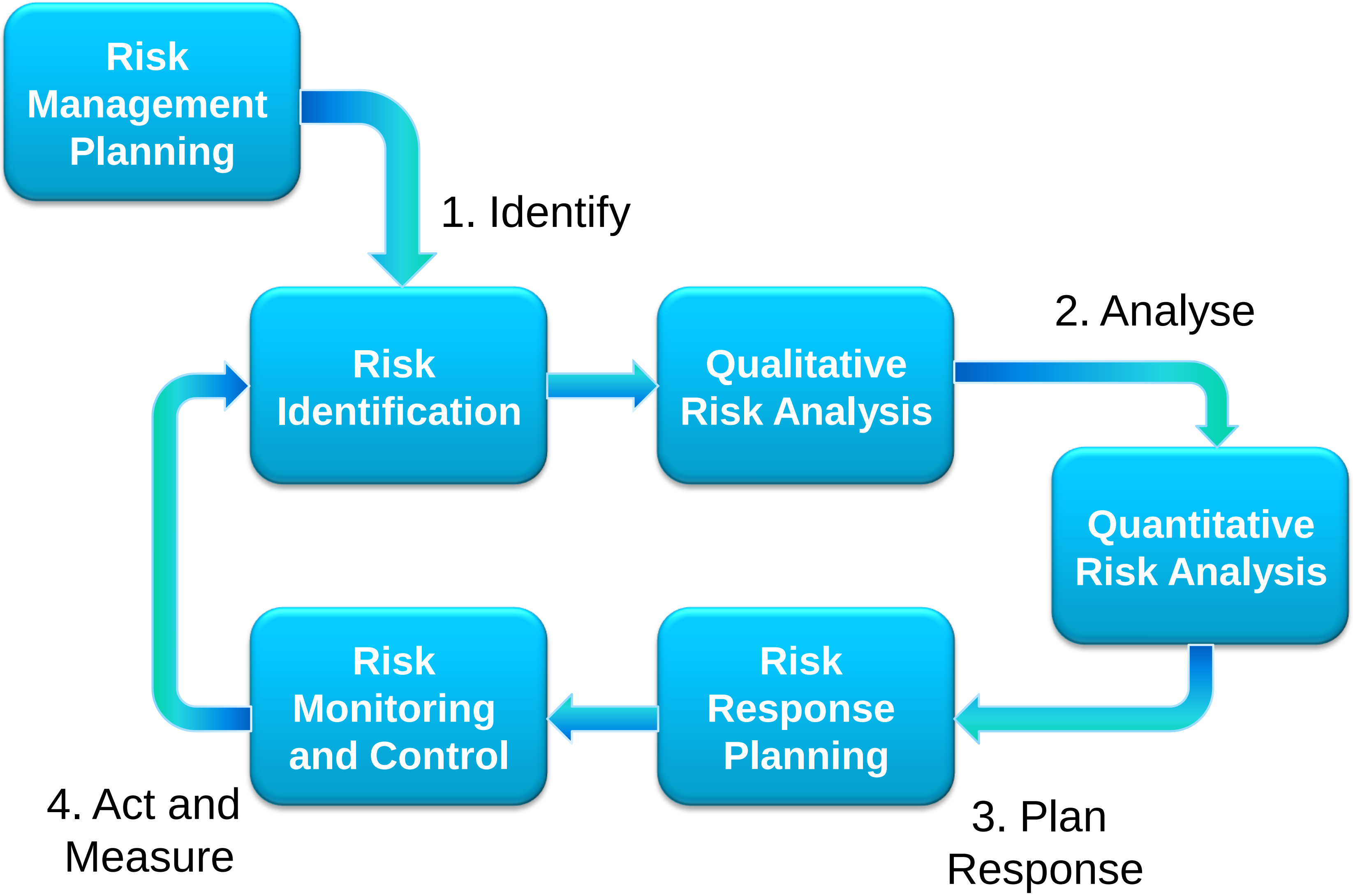
Select

4. Act and Measure

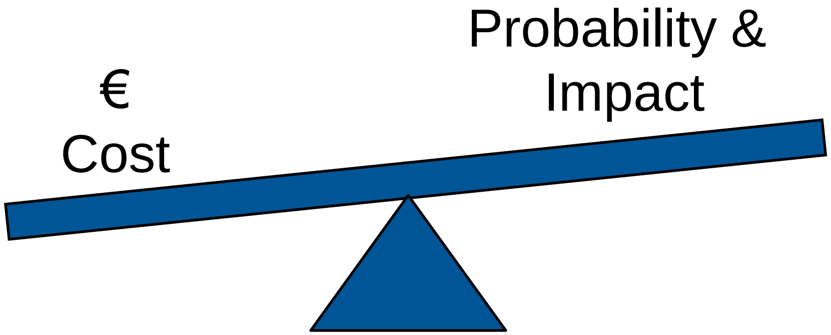
Plan and Resource

Monitor and Report

Risk Management (PMBOK)



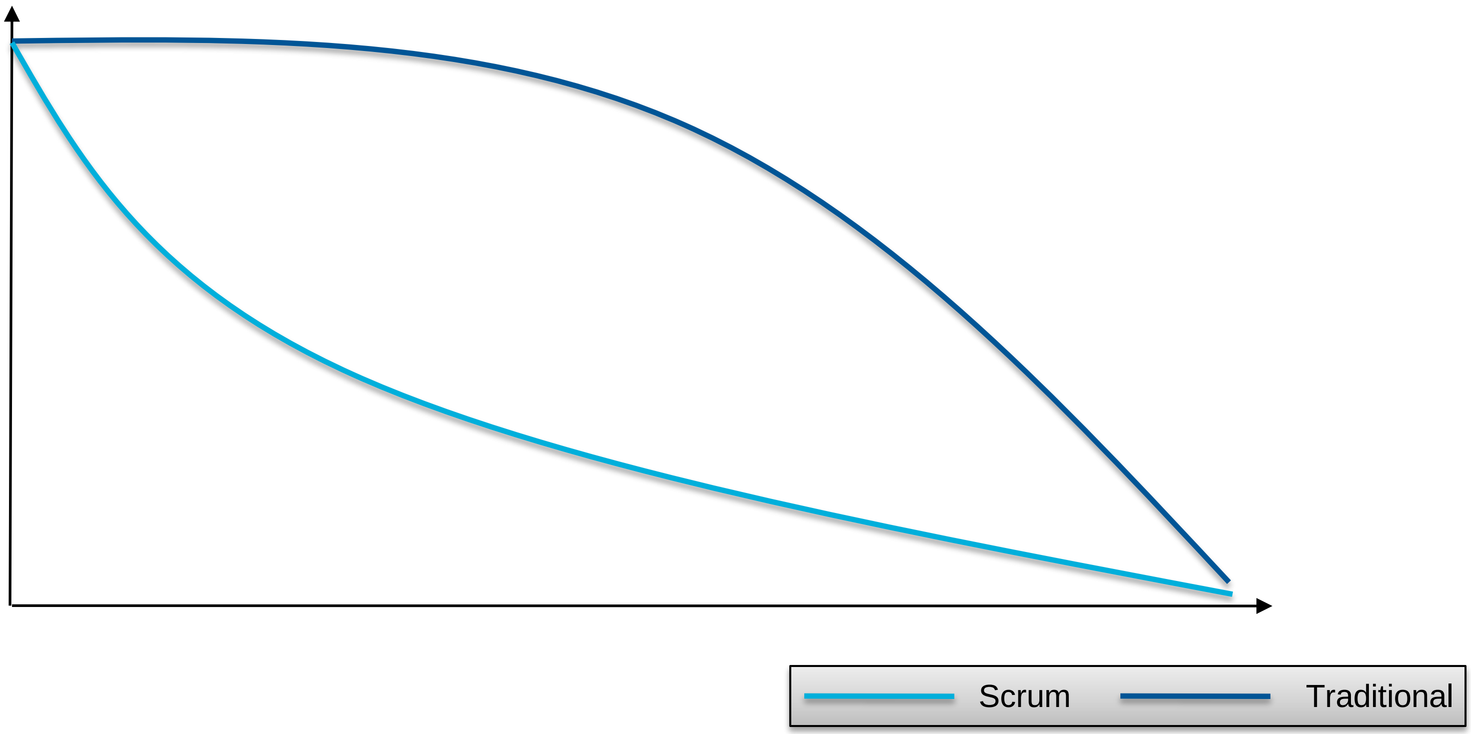
Deciding what to do



But What about the Benefit?

Risk in Traditional versus Scrum

Scrum is a framework for driving down Risk

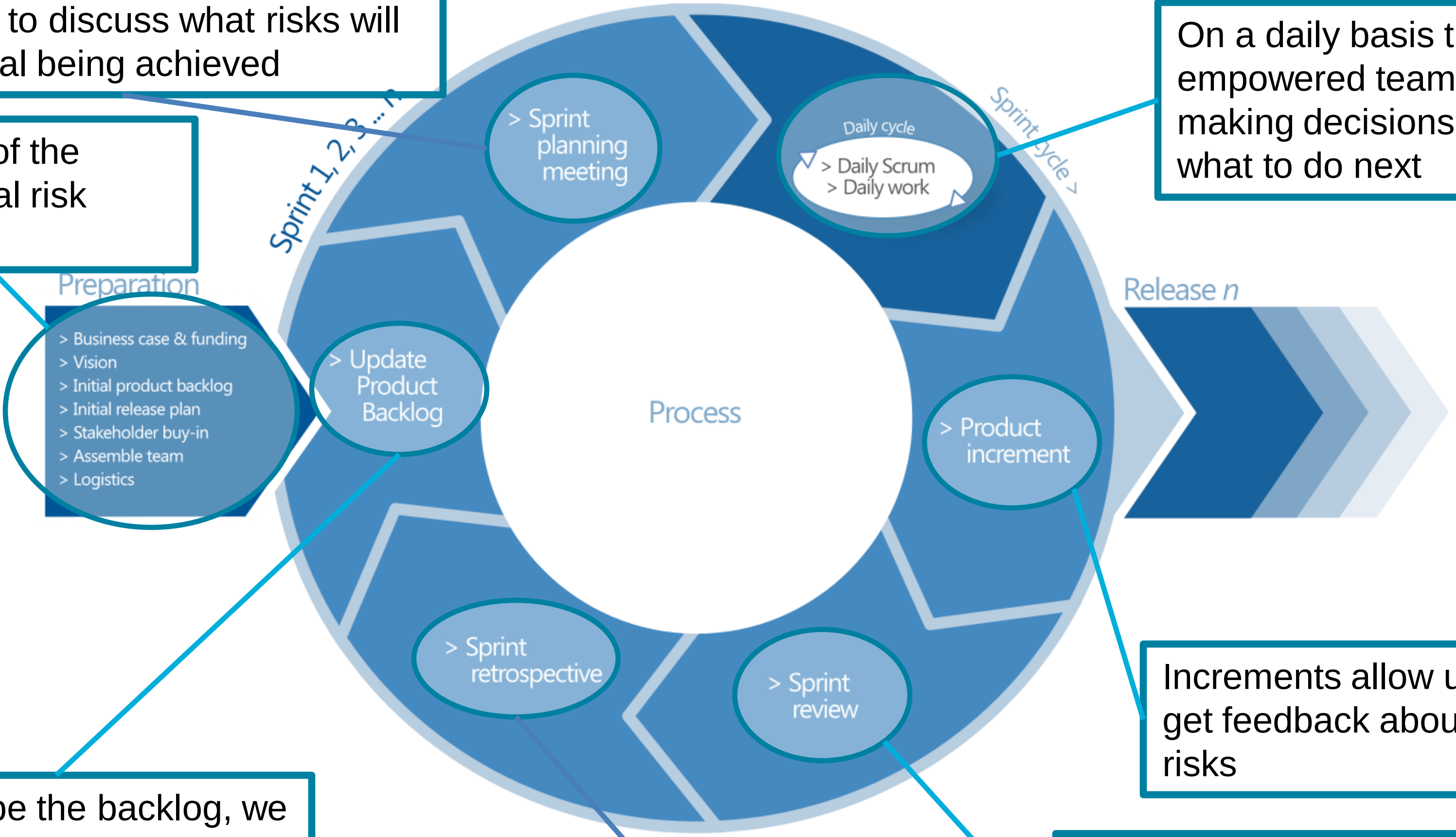


Where in Scrum do we deal with Risks

At Sprint Planning the Team have an opportunity to discuss what risks will stop the goal being achieved

At the start of the Project, initial risk workshop

On a daily basis the empowered team is making decisions about what to do next



As we shape the backlog, we discuss tradeoffs of cost and value and which risks we want to take

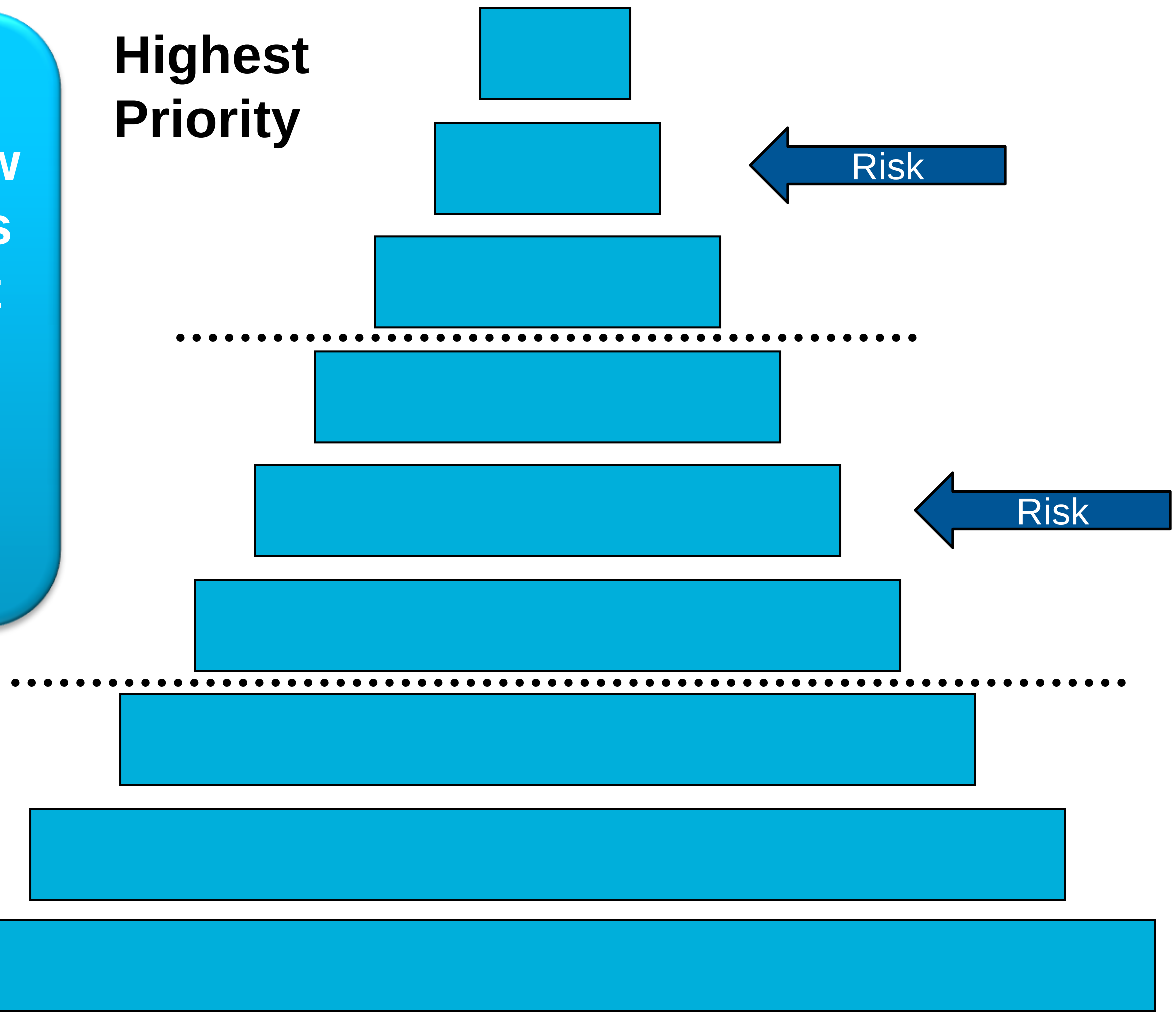
Team discuss how they are doing and decide on actions that mitigate risks

Stakeholders learn more about the product and give feedback, helps drive out risks

Increments allow us to get feedback about the risks

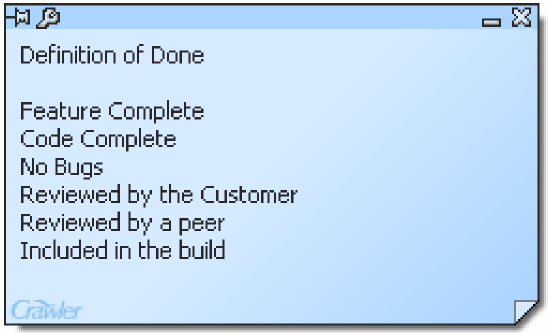
The Product Backlog Contains Your Risk

Team Work ahead & review backlog items this drives out risk



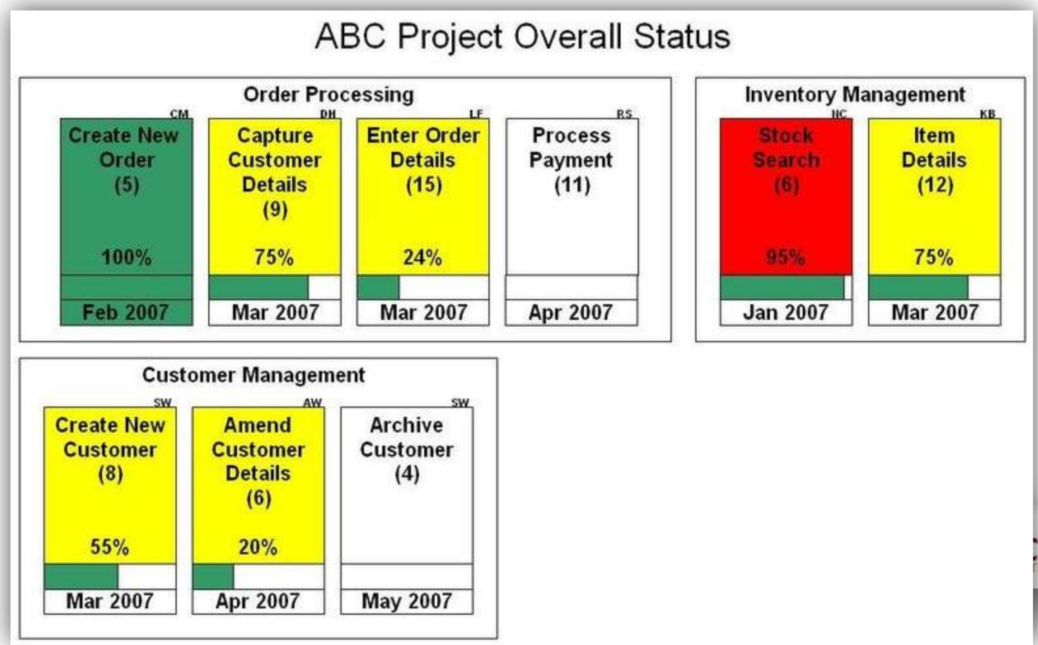
Lower Priority

Tools and Visibility



Definition of Done

Feature Complete
Code Complete
No Bugs
Reviewed by the Customer
Reviewed by a peer
Included in the build



ABC Project Overall Status

Order Processing

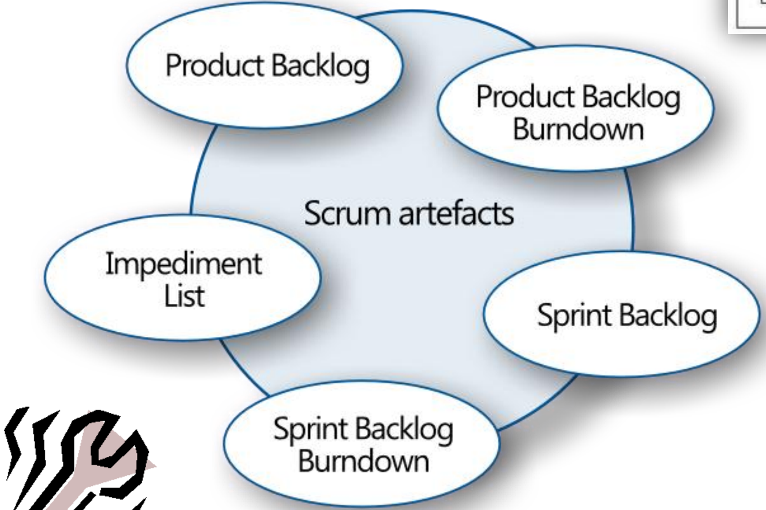
CM	DH	LF	RS
Create New Order (5)	Capture Customer Details (9)	Enter Order Details (15)	Process Payment (11)
100%	75%	24%	
Feb 2007	Mar 2007	Mar 2007	Apr 2007

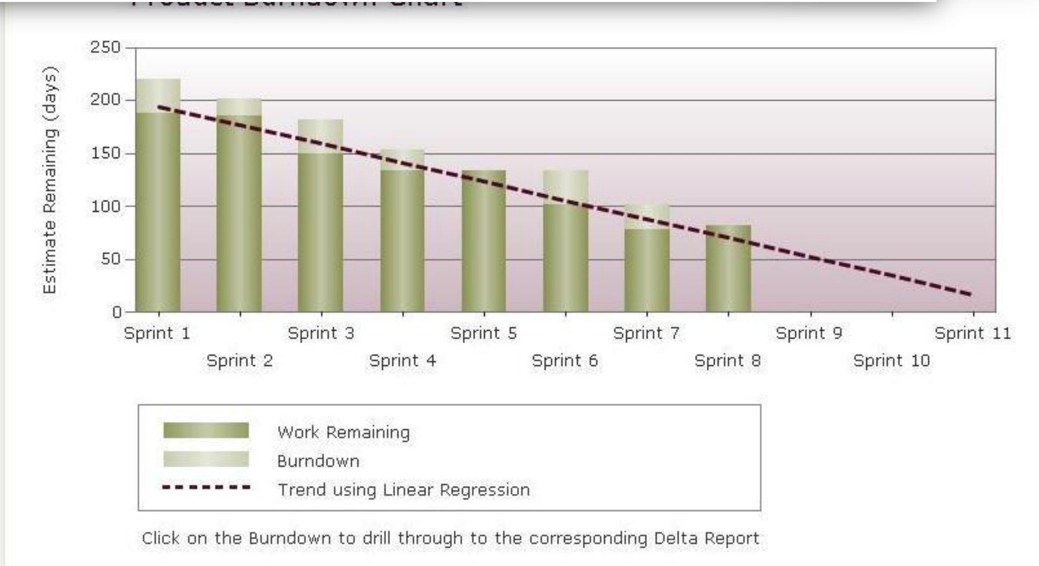
Inventory Management

NC	KB
Stock Search (6)	Item Details (12)
95%	75%
Jan 2007	Mar 2007

Customer Management

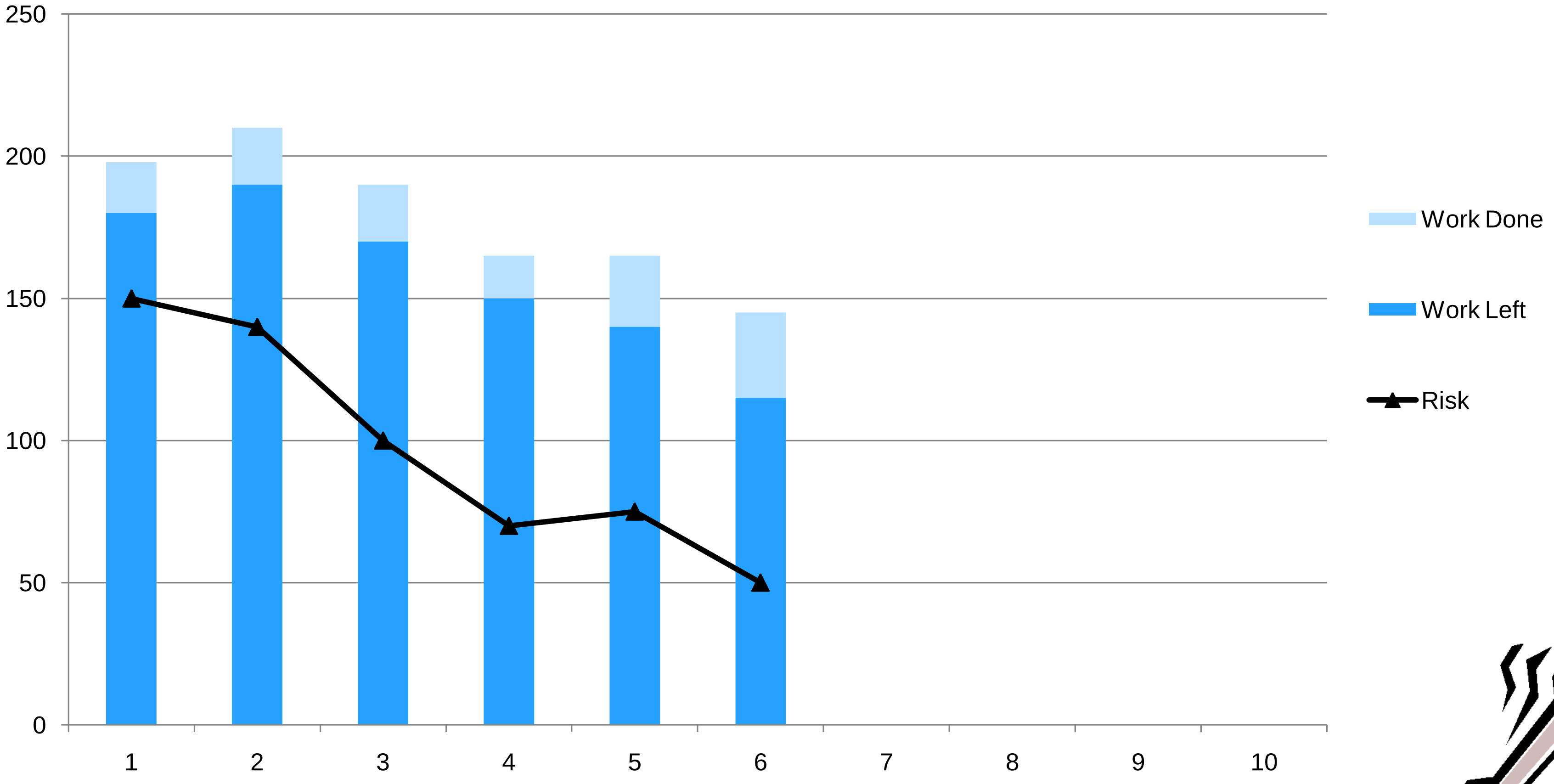
SW	AW	SW
Create New Customer (8)	Amend Customer Details (6)	Archive Customer (4)
55%	20%	
Mar 2007	Apr 2007	May 2007





Click on the Burndown to drill through to the corresponding Delta Report

Making Decisions that drive down Risk



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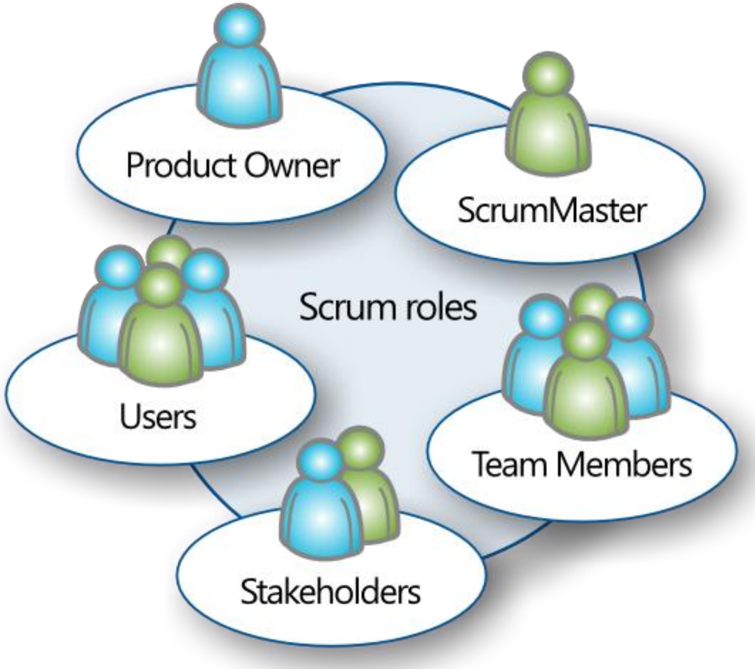
STORY
NOT STARTED
IN PROGRESS
DONE
IMPEDIMENTS

Who is responsible for risk?



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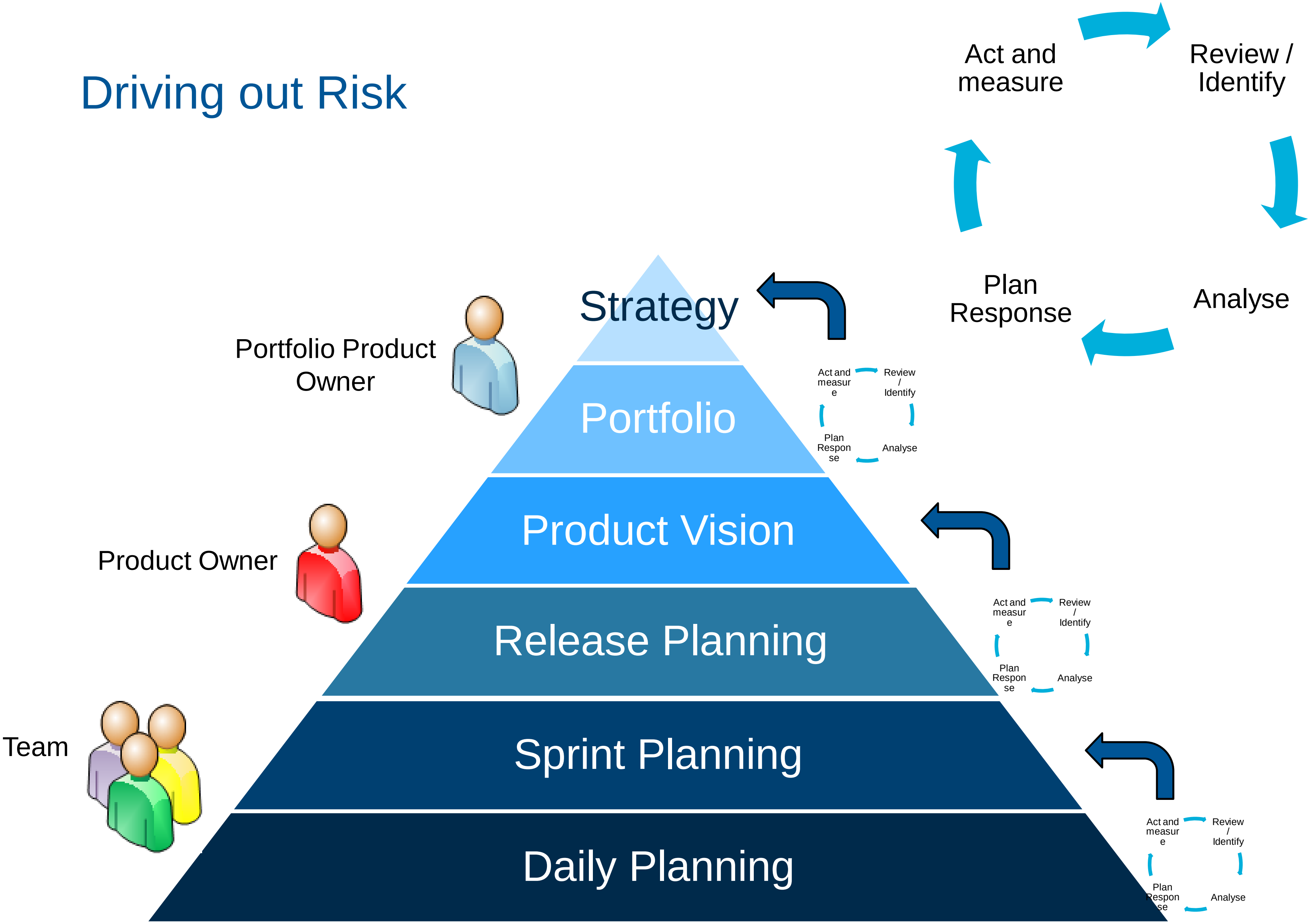
Driving out Risk



Act and measure

Review / Identify

Analyse

Plan Response

Strategy

Portfolio

Product Vision

Release Planning

Sprint Planning

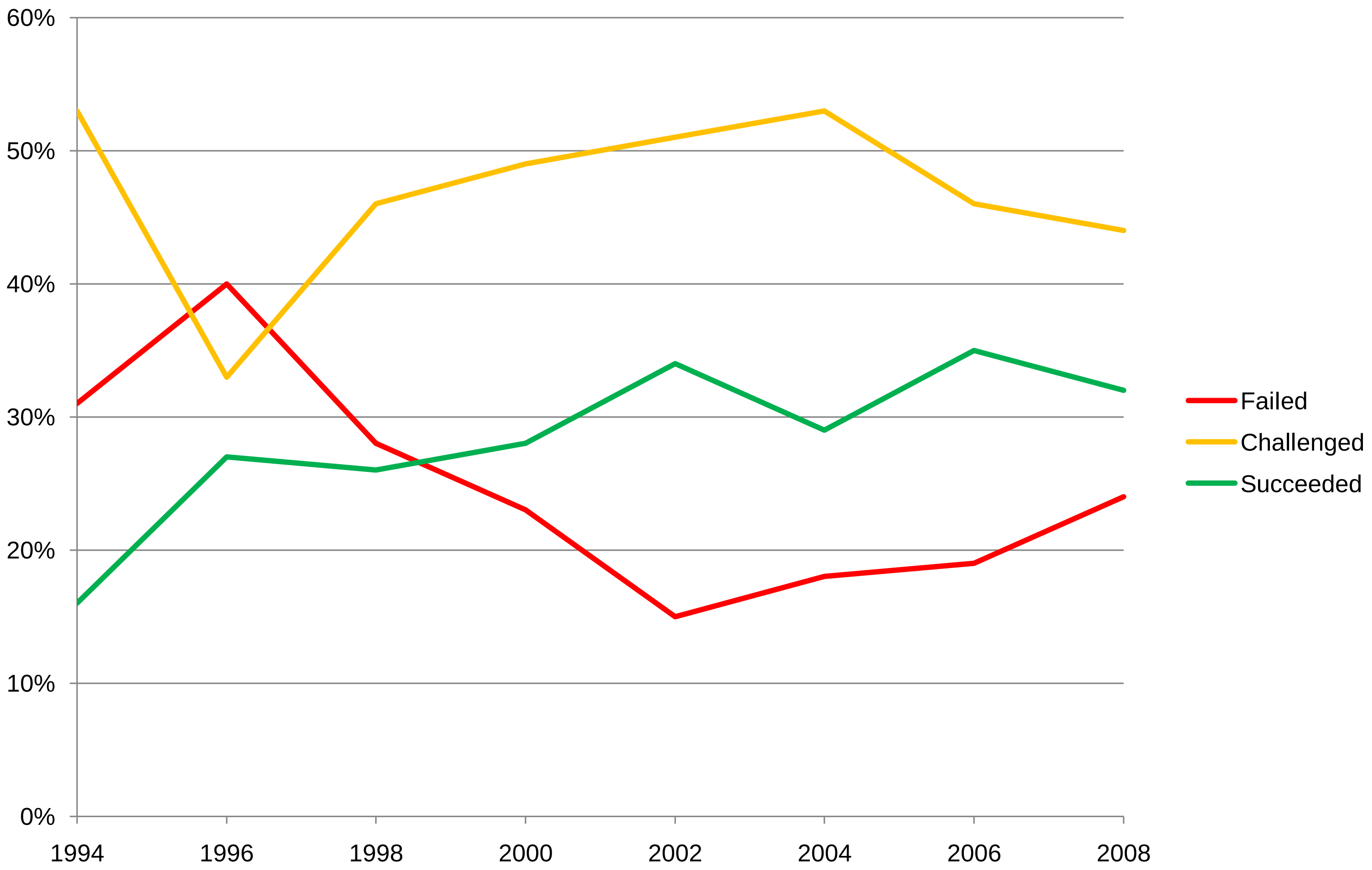
Daily Planning

Portfolio Product Owner

Product Owner

Team

Chaos Survey - IT Project Success



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Some Common Risks to IT Projects

Technical

- Integration Issues
- Buggy Software

Business

- Scope creep
- Inherent Schedule Flaw
- Specification breakdown
- Lack of executive sponsorship
- Lack of User Involvement
- Changing Market
- Benefits less than the cost

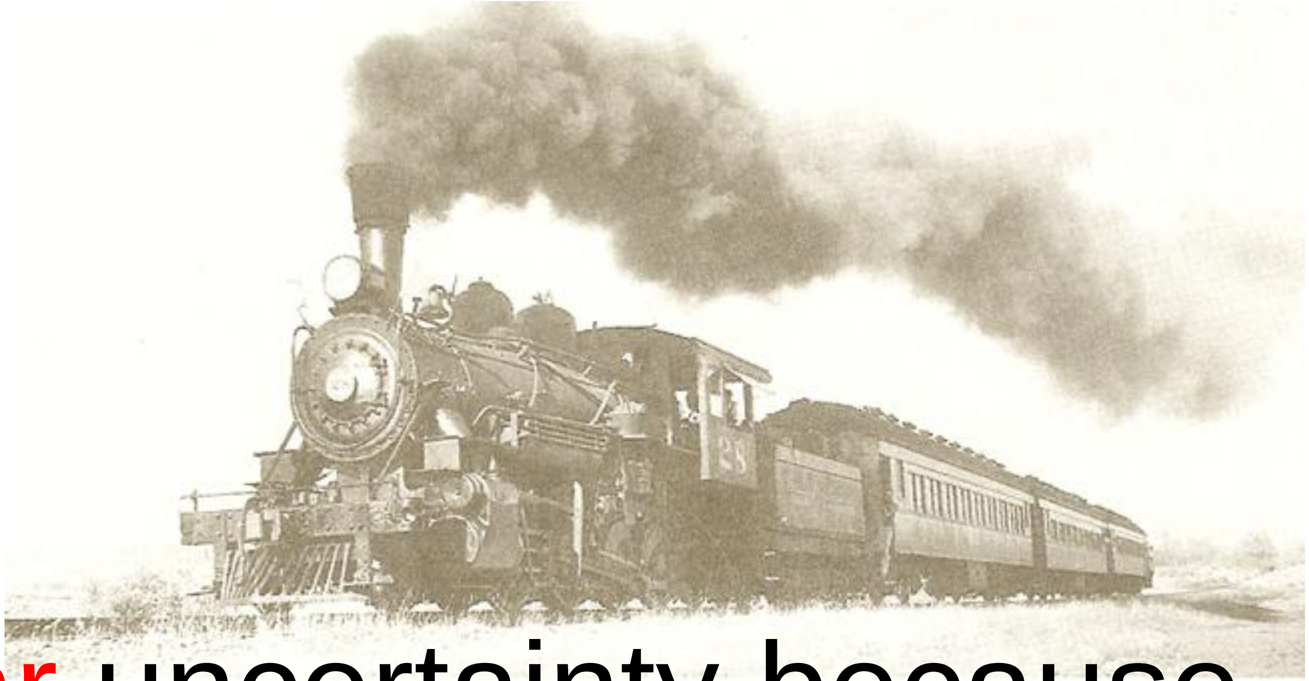
People

- Employee Turnover
- Under performance

Software Development is a craft

- Development is always new
- We need to take Risks
- Can’t remove the uncertainty of outcome
- Use for our competitive advantage

We tend to consider risks that are easily managed or have low impact, but ignore things that will cause the project to fail.



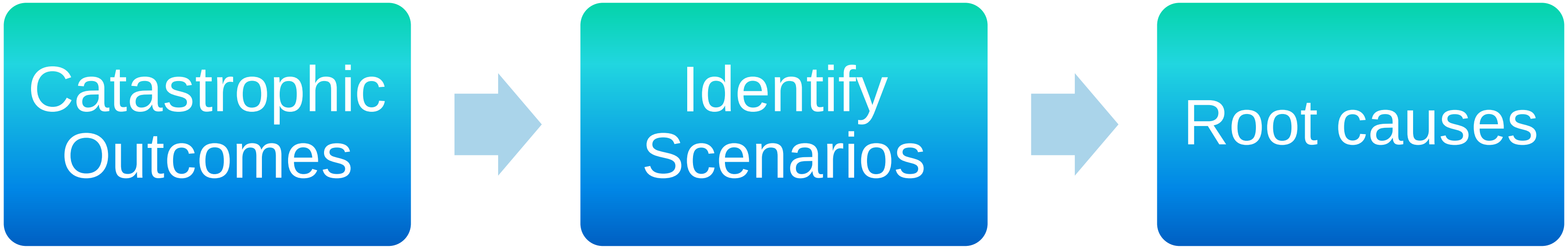
We fear uncertainty because we can not control it

Obstacles to Risk Management

- Can do thinking - Unwillingness to disturb the rosy picture
  - Don’t be a negative thinker
  - Don’t raise a problem unless you have a solution
  - Don’t say something unless you can prove it is a problem
  - Don’t be the spoiler
  - Don’t raise a problem unless you want the solution to become your responsibility
- The need to appear in control
- Political power play
- Short term thinking
- Lack of Ownership (It’s not my problem)

Yesterdays problem is tomorrows risk

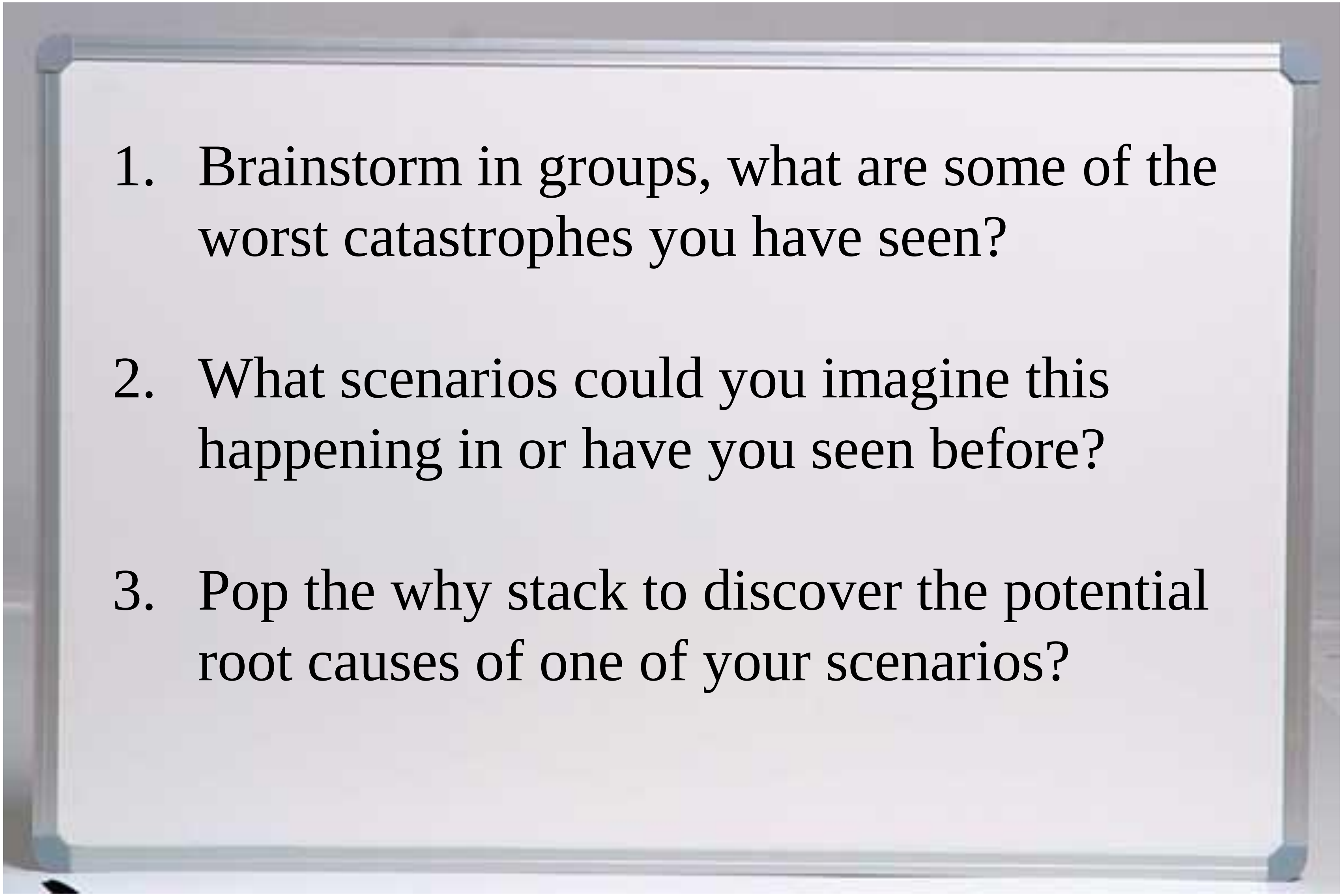
Risk Workshop



Catastrophic Outcomes

Identify Scenarios

Root causes



1. Brainstorm in groups, what are some of the worst catastrophes you have seen?

2. What scenarios could you imagine this happening in or have you seen before?

3. Pop the why stack to discover the potential root causes of one of your scenarios?

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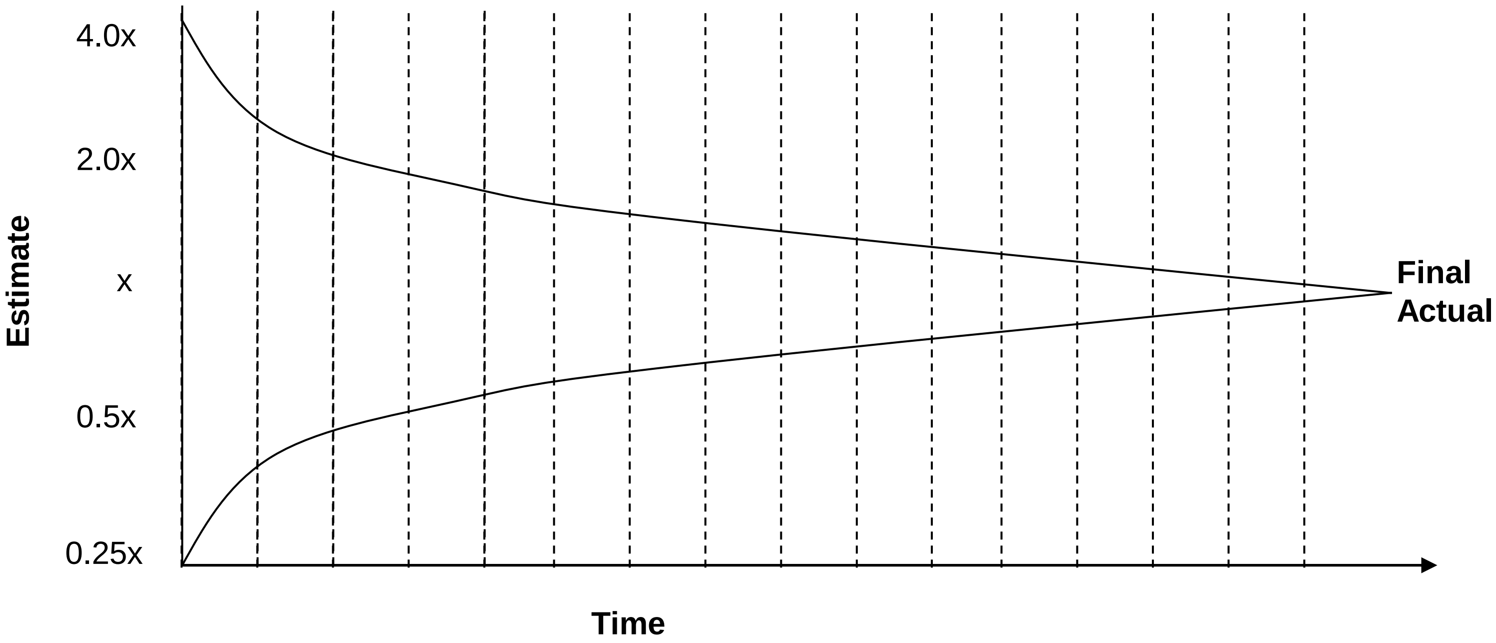
A Bad Smell

Inherent Schedule Flaw

Cone of Uncertainty

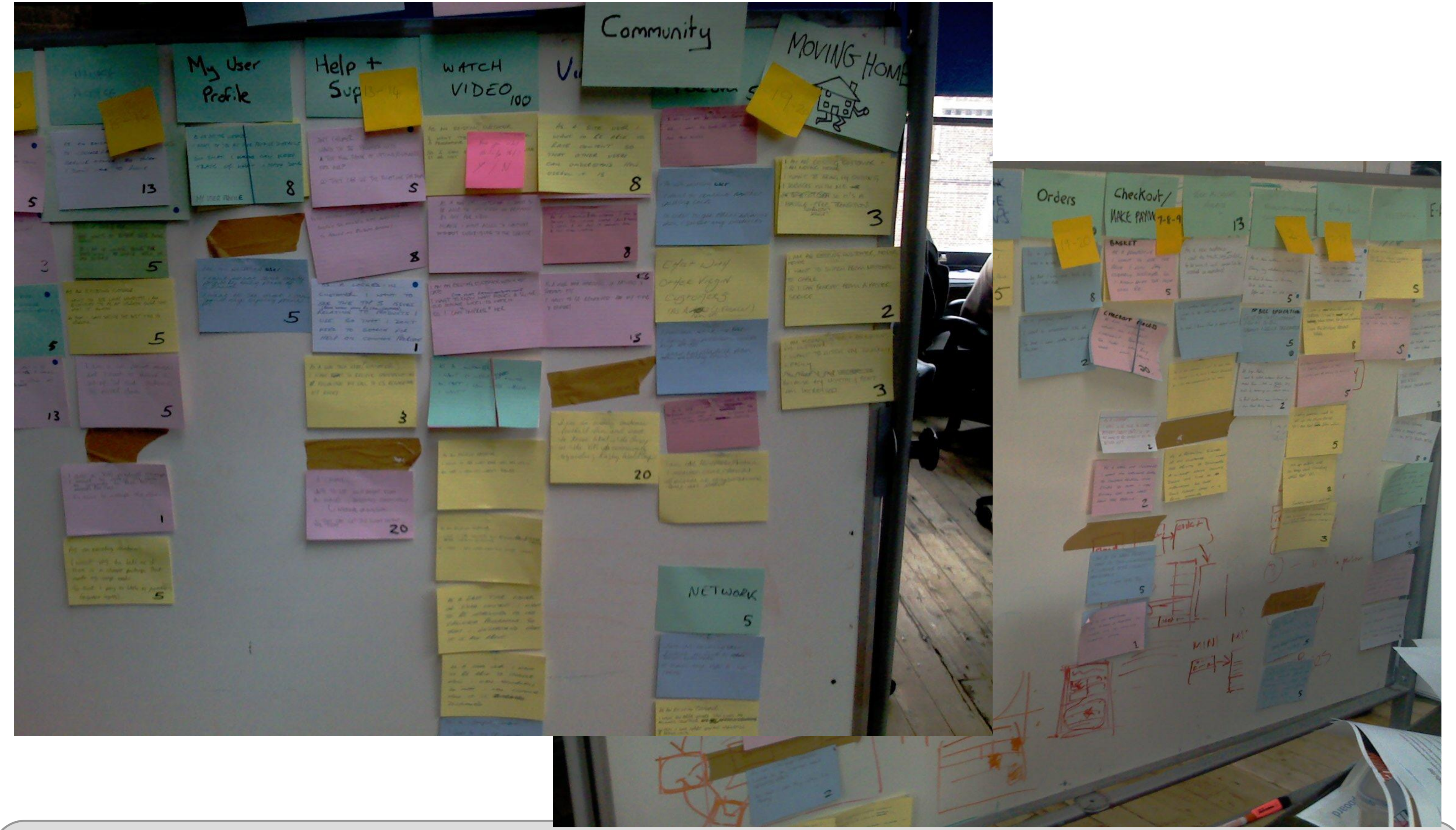
Accept that software projects are noisy

S. McConnell, Software Project Survival Guide (1998)



The best Risk Mitigation strategy is incremental Delivery

Case Study



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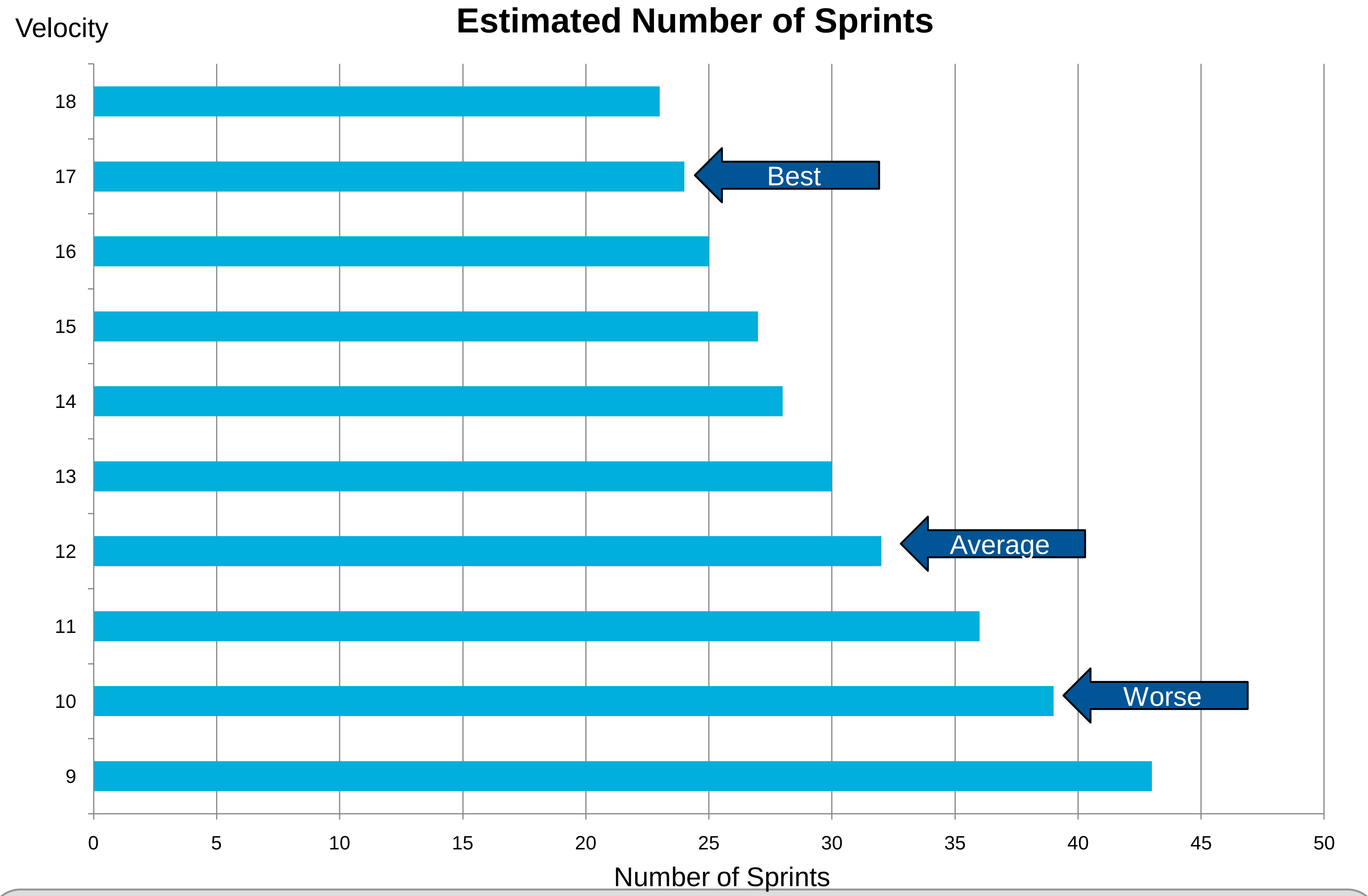

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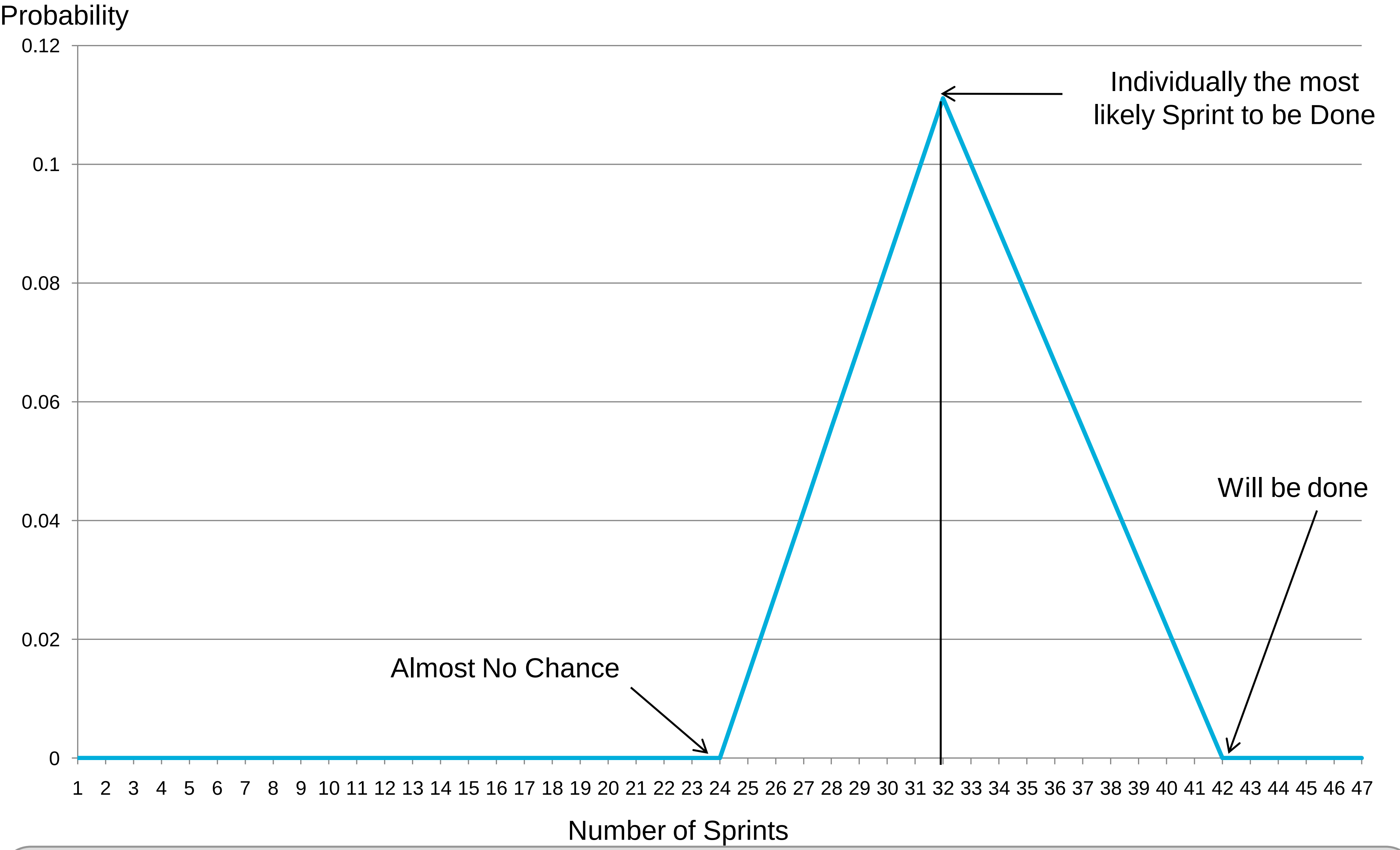
Relative Probability of being complete at a given Sprint

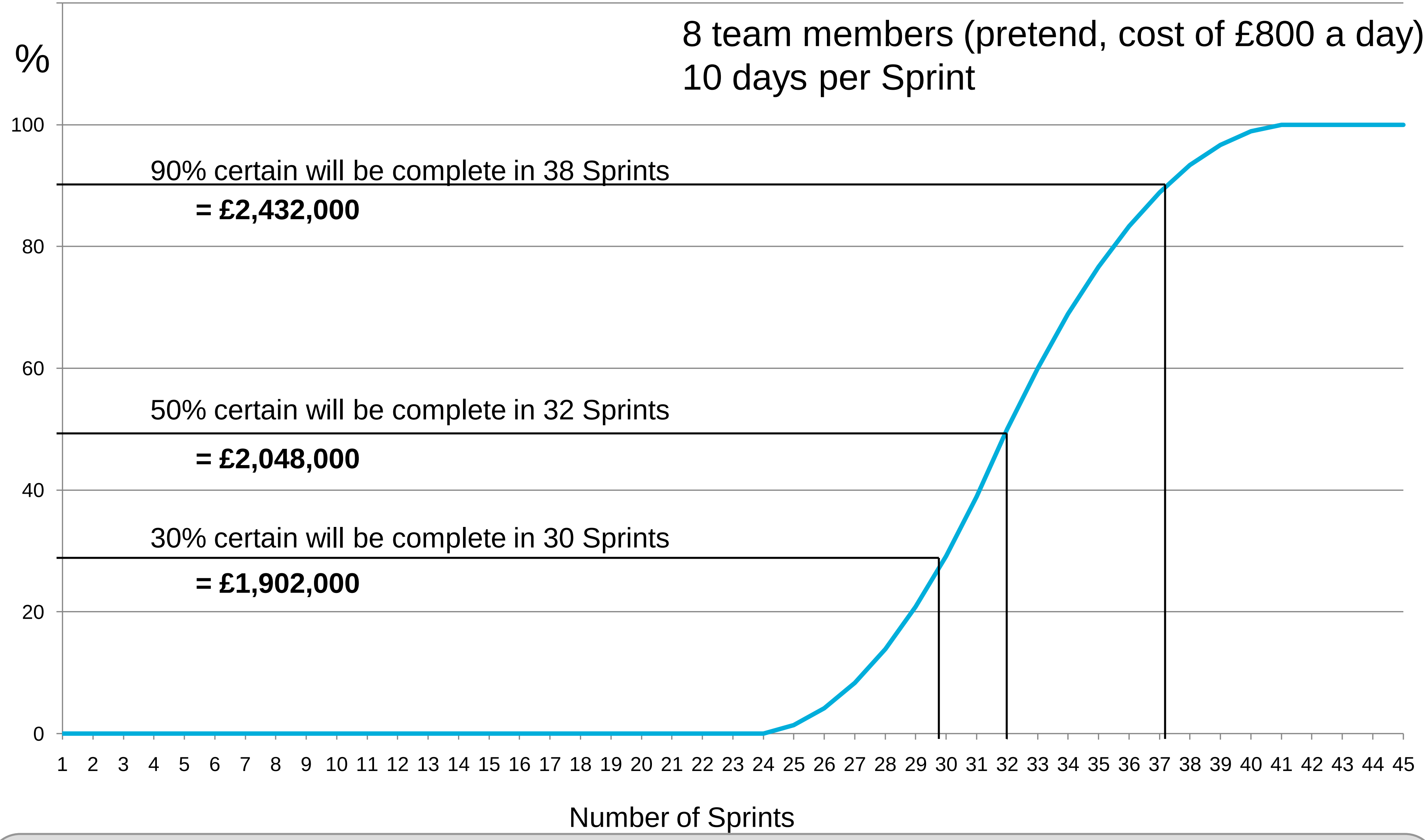


Individually the most likely Sprint to be Done

Will be done

Almost No Chance

Cumulative Probability of being complete by Sprint



8 team members (pretend, cost of £800 a day)
10 days per Sprint

90% certain will be complete in 38 Sprints

= £2,432,000

50% certain will be complete in 32 Sprints

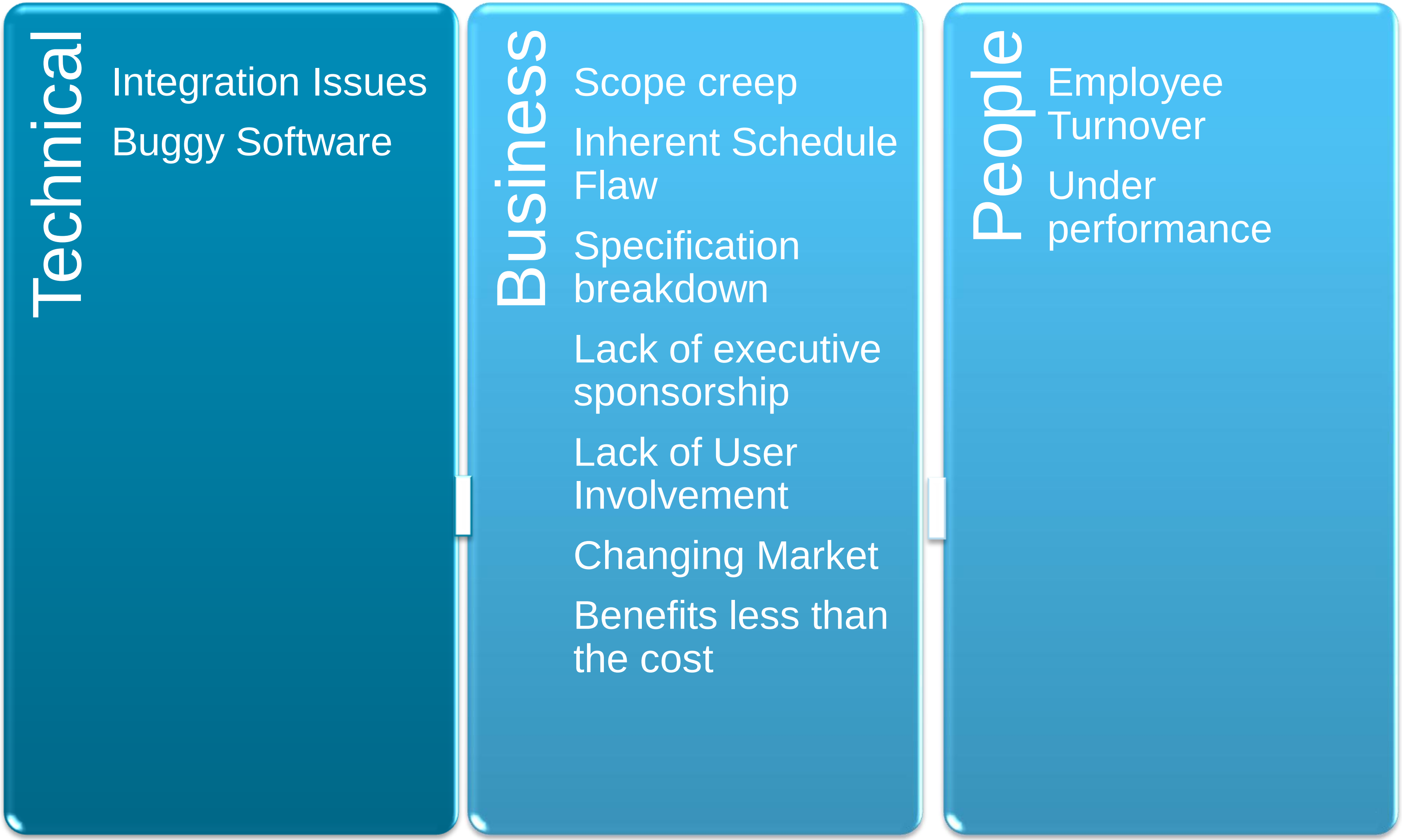
= £2,048,000

30% certain will be complete in 30 Sprints

= £1,902,000

Number of Sprints

Revisiting the Risks



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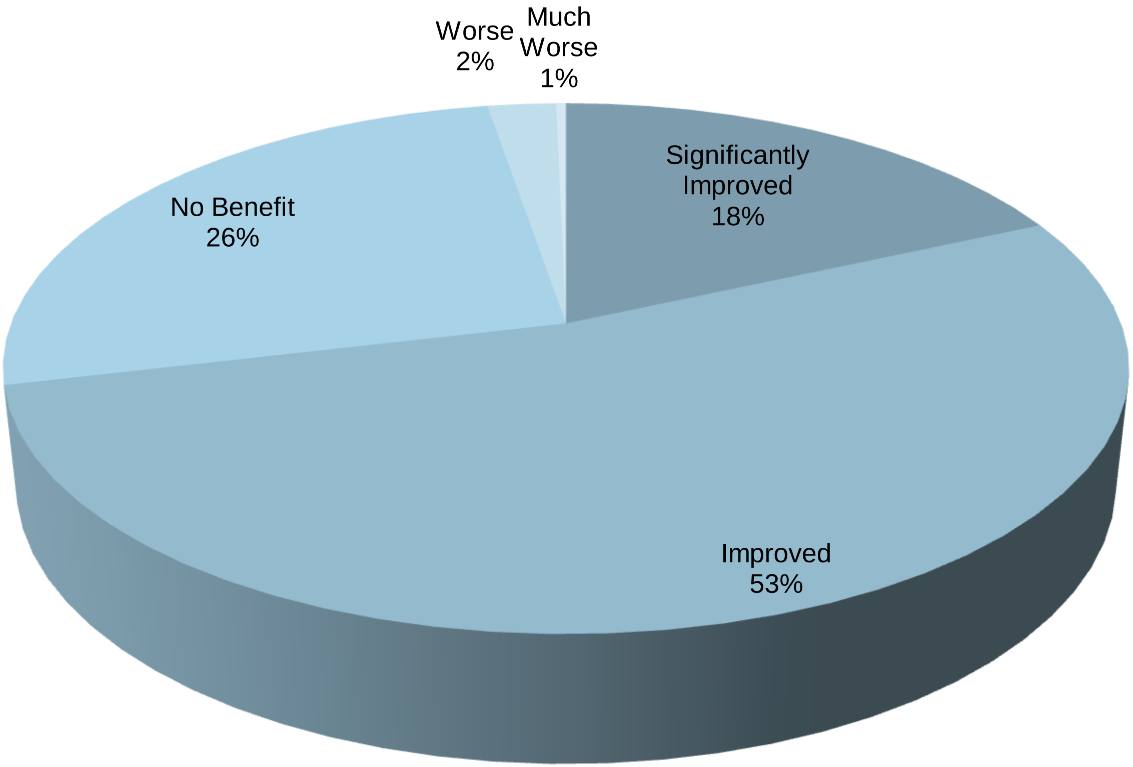
Reduced Risk



Results from over 3000 respondents in 80 Countries who have used Agile in their organisations

Source: VersionOne 3rd Annual Survey 2008
"The State of Agile Development
"July 2008

Summary

- Make uncertainty visible so that informed decisions can be made to use it for your competitive advantage
  - don’t seek to control risk
- Create an environment where people can and want to act responsibly
- If Scrum is working in your organisation, you are dealing with risks and you should be getting better

Questions?

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