

Projektstyring

En introduktion til projektstyring, agile metoder



Dagens program

- Hvad er projektstyring
- Traditionelle metoder
- Agile metoder
- Scrum





Hvad er et projekt

- Et projekt er som en engangsopgave (unik opgave) med en serie sammenkædede aktiviteter, et konkret mål eller slutresultat, et start – og sluttidspunkt
- Ordet projekt bruges om mange forskellige aktiviteter og definitionerne varierer. De fleste definitioner indeholder nedenstående fire punkter:
 1. En unik opgave – i modsætning til rutineopgaver, sager mv.
 2. Projektet har et specifikt formål, der indeholder to typer mål
 1. Produktmål: det konkrete resultat af projektet.
 2. Nytemål: der er det slutmål, som produktmålet skal opfylde.
 3. Projektet har sin egen organisation – med forskellige typer ressourcer, der i fællesskab bidrager til projektets mål.
 4. Projektet har en tidsmæssig afgrænsning. Projektet startes og afsluttes

Kilde: Wikipedia

Hvad er projektstyring?

Project management is the process and activity of planning, organizing, motivating, and controlling resources, procedures and protocols to achieve specific goals in scientific or daily problems

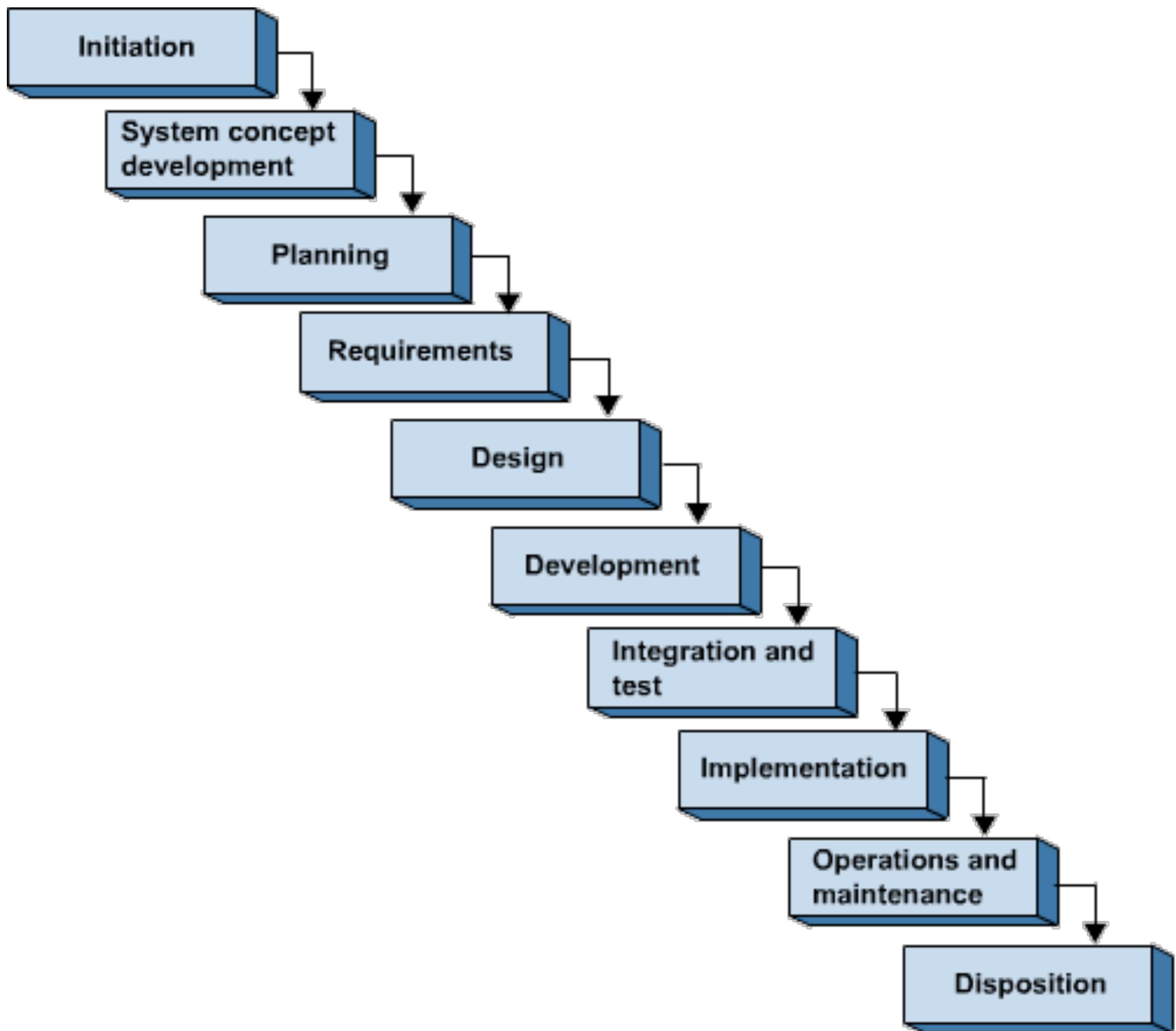


Kilde: Wikipedia

Traditionelle metoder

- Grundig kravspecificering
- Planlægning
- Eksekvering
- Ingen tilbageløb
- “Vandfaldsmodel”





PROJECT MANAGEMENT PRINCIPLES

Project Management
Rules & Guiding
Principles

Project Management
Process

Project Environment

Critical Path Analysis

Quality Assurance &
Milestone / Deliverable
Approach

PHASE

Phase 1:
Project
Initiation &
Approval

Phase 2:
Project
Planning

Phase 3:
Analysis &
Design

Phase 4:
Build & Test

Phase 5:
Implementation

Phase 6:
Completion

SOLUTIONS

- Project Proposal/
Business Case
- Project Start-Up
Approval

- Project
Management Plan
- Risk Management
& Communication
Plan
- Implementation,
Testing & Training
Strategy

- User
Requirements
- User Systems &
Technical
Specifications
- System
Acceptance Test
Plan

- Establish
Development &
Test Environment
- Applications &
Interfaces
- Operational &
Training
Procedures
- Detailed Test
Plans

- System Installation
& Program
Migration
- Data Conversion
- Training &
Contingency Plans

- Post
Implementation
Review
- Establish System
Support Group
- Resolution of
Outstanding
Issues
- Project Closure
Sign-Off

Project Risk
Management

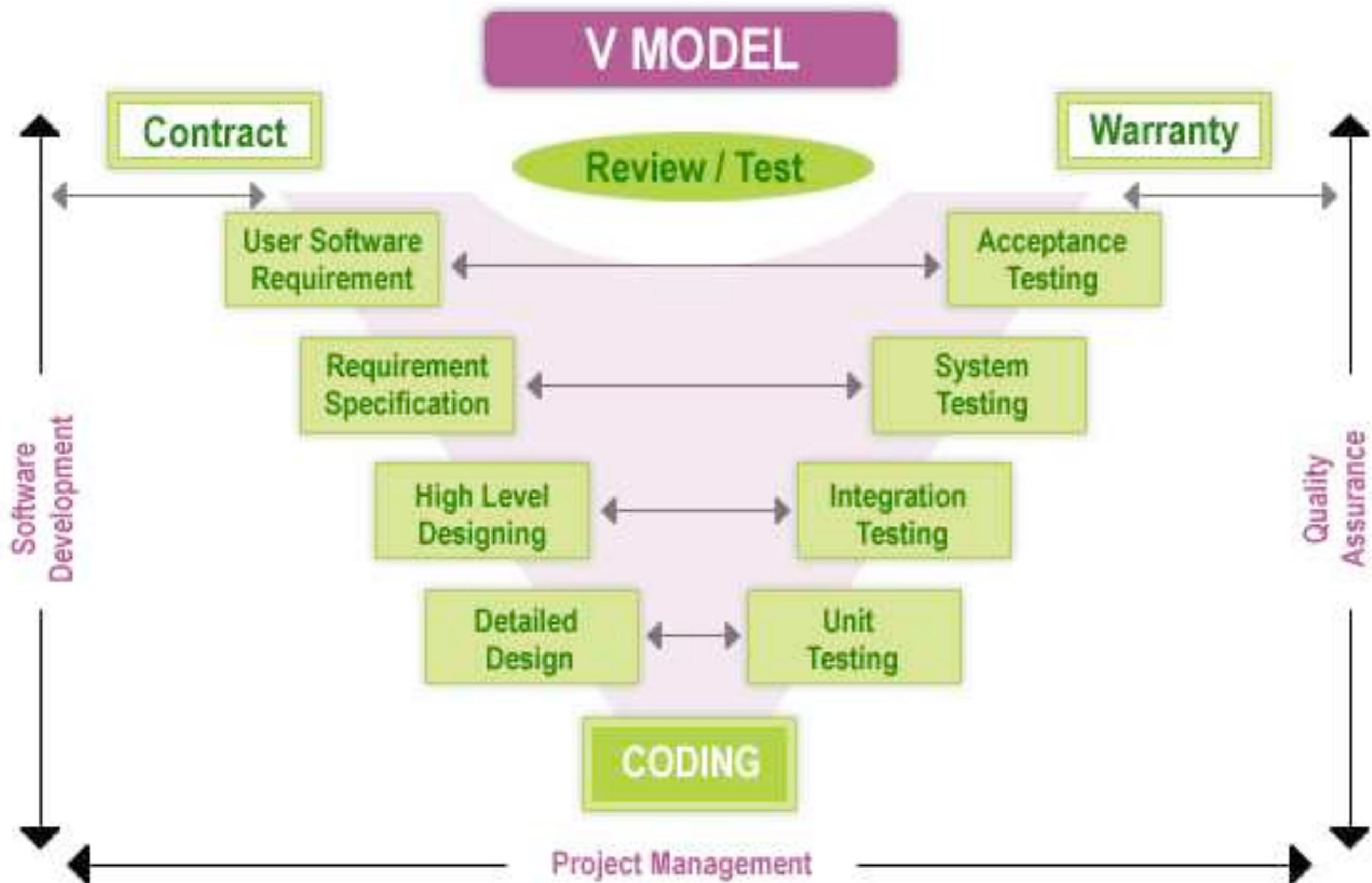
Governance

Stakeholder
Management

Organisational
Change
Management

Benefits
Realisation

Quality



Kritik af traditionelle metoder

- Man kender ikke alle krav i begyndelsen af en proces.
- Krav kan ændre sig i løbet af processen.
- Processen bliver uforudsigelig, når der bruges nye værktøjer og teknologier.
- (Dårlige) erfaringer:
 - Ofte overraskelser undervejs
 - Ofte forsinkelser og fordyrelser
 - Ikke altid et produkt der dækker behovet



Kravspecifiering...



<https://www.youtube.com/watch?v=BKorP55Aqvg>



What the customer said



What was understood



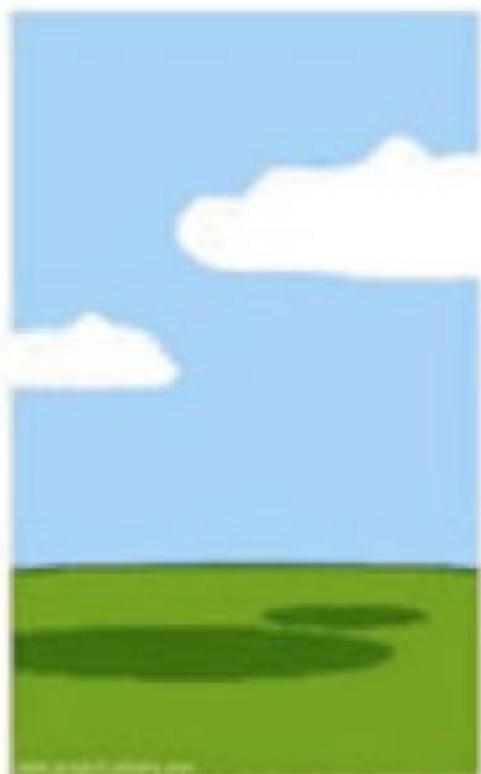
What was planned



What was developed



What was described by the business analyst



What was documented



What was deployed



The customer paid for...



How was the support



What the customer really needed

Agile metoder

- Et opgør med dokumentation og administration
- Der findes mange -SCRUM er bare en af dem
- (Extreme programming, testdriven development...)

Det agile manifest

- Individer og samarbejde frem for processer og værktøjer
- Velfungerende software frem for omfattende dokumentation
- Samarbejde med kunden frem for kontraktforhandling
- Håndtering af forandringer frem for fastholdelse af en plan

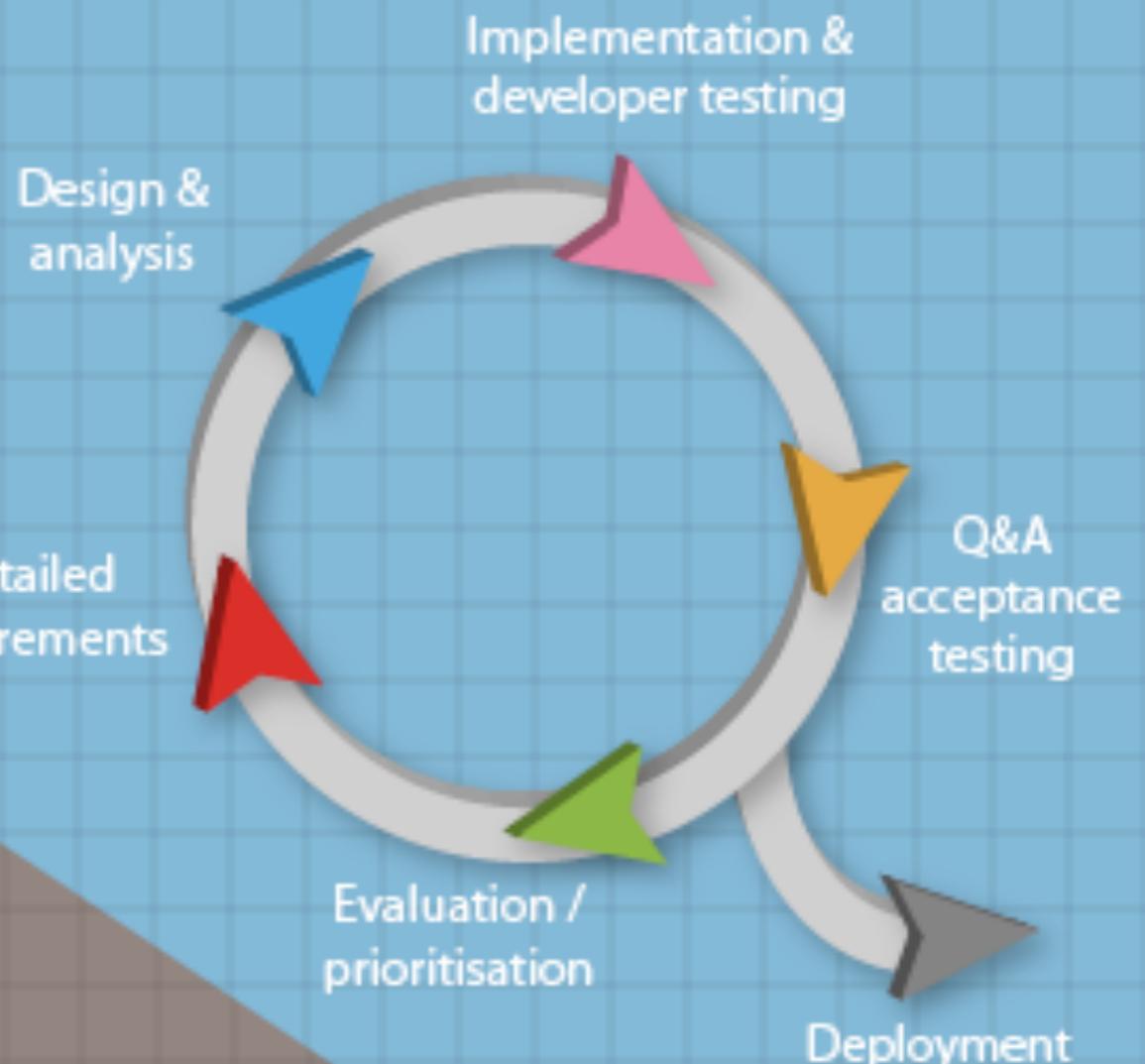
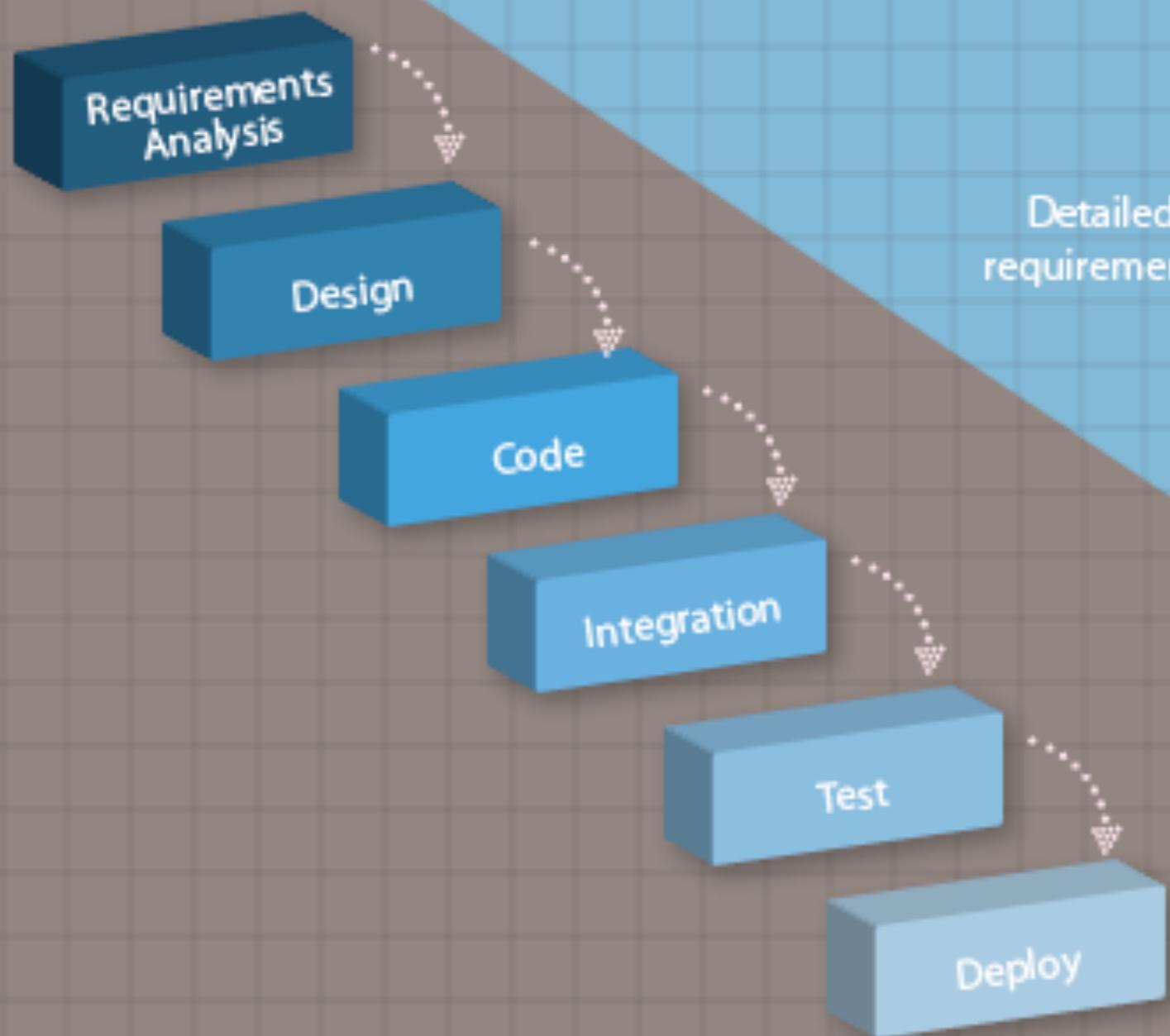
Kilde <http://agilemanifesto.org/iso/dk/>

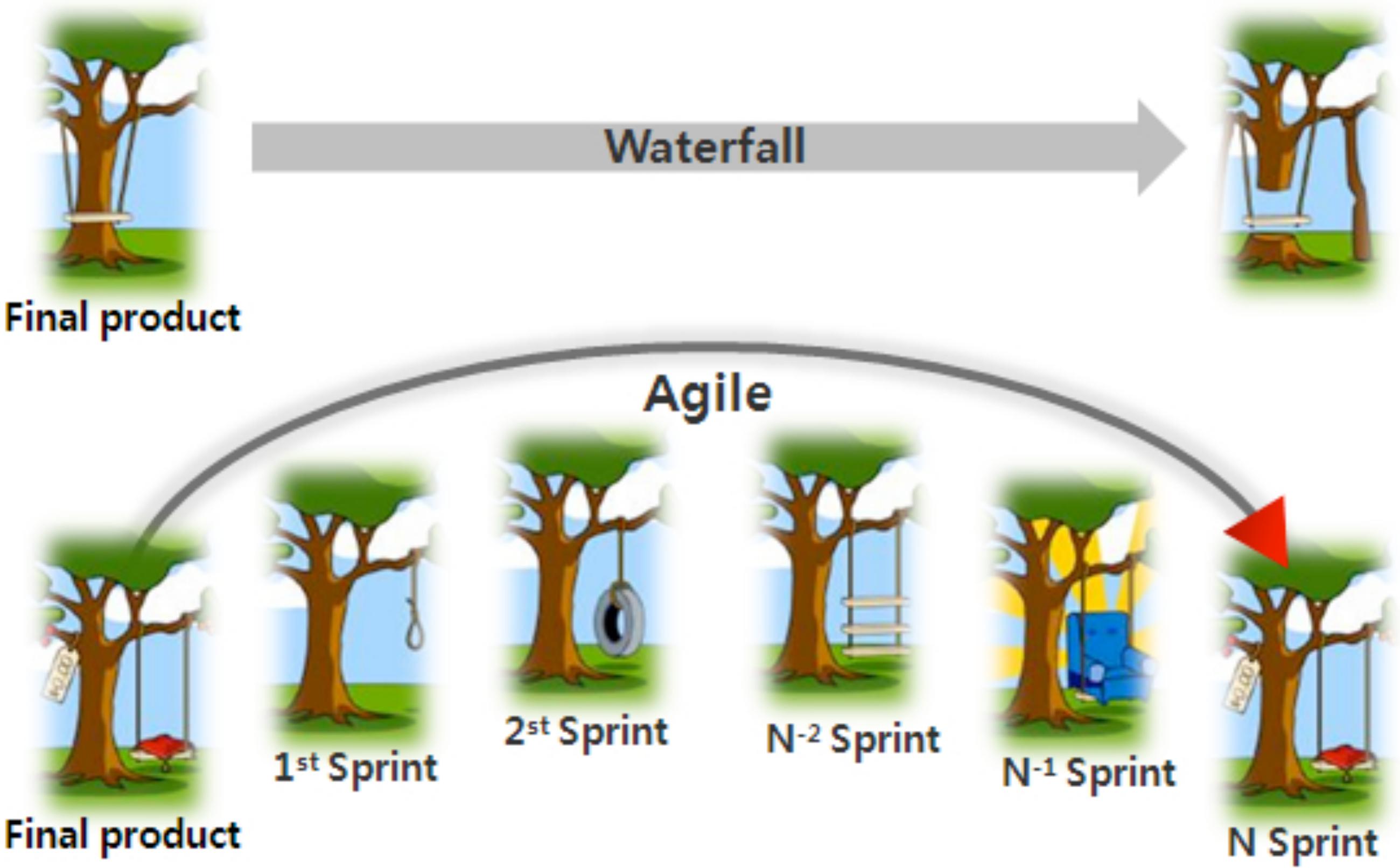
10 kendetegn ved agile metoder

1. Active user involvement is imperative
2. The team must be empowered to make decisions
3. Requirements evolve but the timescale is fixed
4. Capture requirements at a high level; lightweight & visual
5. Develop small, incremental releases and iterate
6. Focus on frequent delivery of products
7. Complete each feature before moving on to the next
8. Apply the 80/20 rule
9. Testing is integrated throughout the project lifecycle – test early and often
10. A collaborative & cooperative approach between all stakeholders is essential



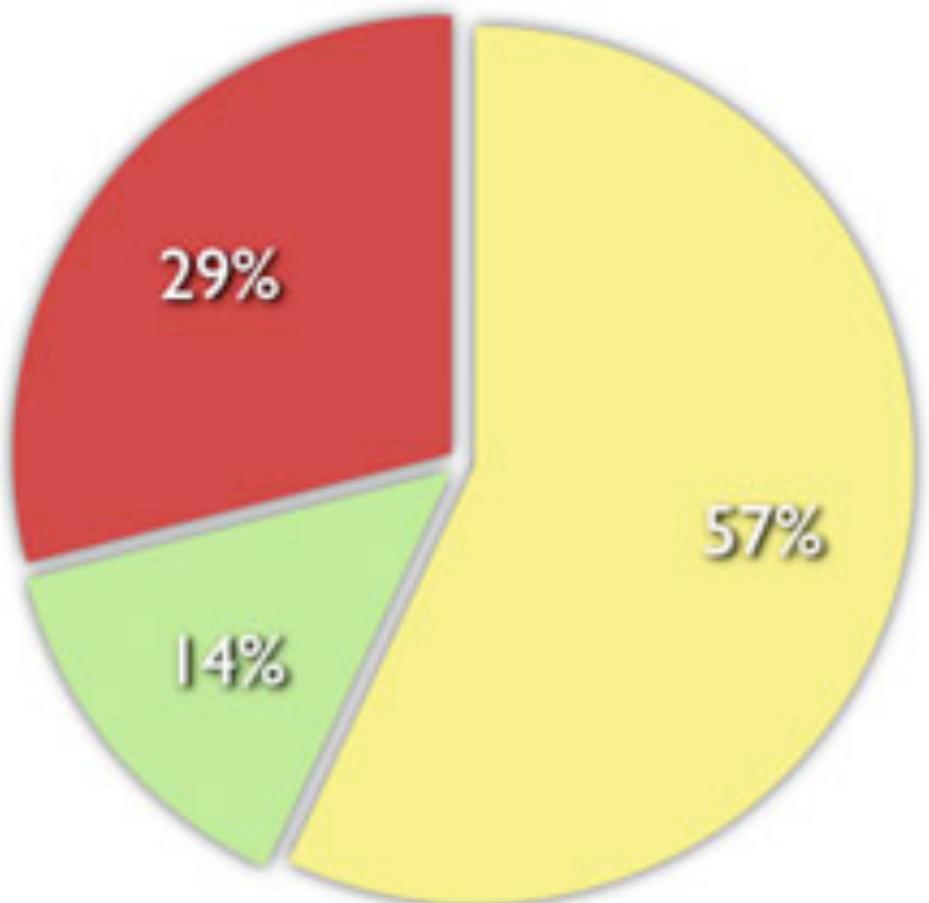
Agile



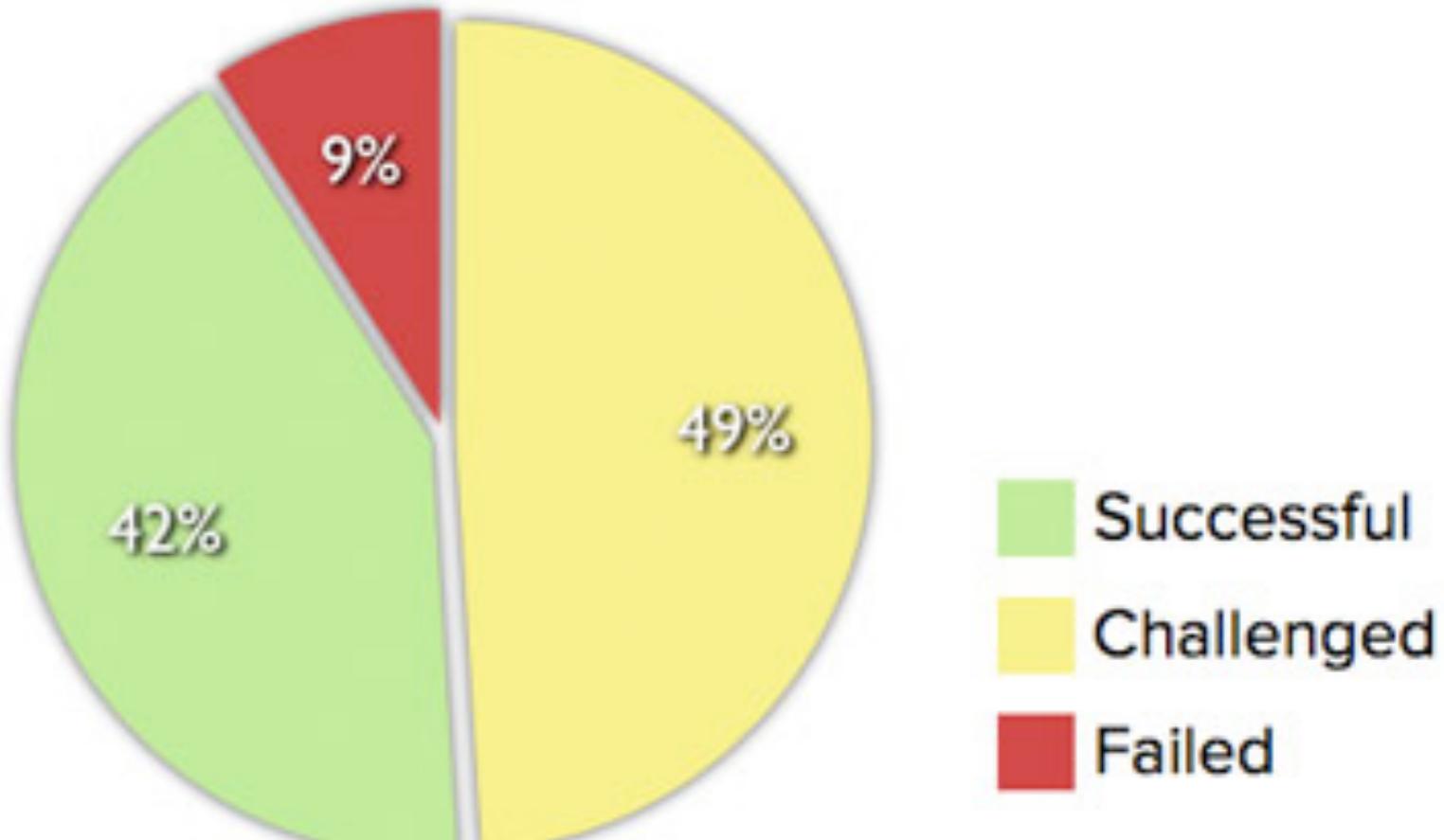


Traditional methodology	Agile methodology
Requirements are clear at the inception of the project	Requirements are not clear at the inception of the project
Limited communication, more stress in documentations	More communication allows to develop a product over short period of time, lesser importance on documentation
Elaborate process should be followed	Limited process involved
Time consuming as they develop the complete product at a single cycle	Iterative model allows to develop easily in a short span of time
No scrums calls and stand up calls	Scrum calls or stand up calls at regular intervals to track the progress and get feedback from client
No flexibility to change requirement at any state. Lots of rework effort are involved in that case	More flexible to change requirement at any stage
Time consuming to understand, develop, test and defect fixing	Saves a lot of time due to frequent communication with stake holders, iterative development and proper feedback
Testing happens only after the completion of the development	Testing team works in parallel with the development team which helps to find defects as soon as possible
Automation is not a usual practice	Continuous automated testing which ensures better quality

Waterfall



Agile



Source: The CHAOS Manifesto, The Standish Group, 2012.

App-udvikler: DSB's kæmpe app-projekt er ubegribeligt og bizart

Nye versioner af operativsystem, programmeringssprog, designstile, UX-paradigme - og en forfærdelig masse nye skærmstørrelser - gør lange app-projekter som DSB's håbløse, lyder kritikken.

Henning Mølsted  @Henningcph Tirsdag, 10. maj 2016 - 9:29 11



DSB er i gang med at udvikle en ny mobil-app til den halve million daglige rejsende. Men med den hastige teknologiudvikling er der stor risiko for, at appen er helt forældet, når den er færdig. Misren er, at statsbanerne har lanceret udviklingsprojektet til 33 mio. kroner til at vare i hele fire år.

Sådan lyder kritikken fra en af Danmarks erfarne app-udviklere, David H. Christensen, om det store appudviklingsprojekt, som Version2 tidligere har omtalt.

David Christensen er mobil app-arkitekt ved det danske digitale bureau DIS/PLAY, som tidligere bl.a. har arbejdet ved den succesfulde trænings- og løbe-app Endomondo.

Beskrivelsen af projektet er relativt sparsom, men det fremgår af udbudsbekendtgørelsen, at DSB også ønsker en beskrivelse af tekniske muligheder og markedsmuligheder i projektet.

Læs også: [DSB starter udvikling af app til 33 mio. kroner. Danmarks dyreste?](#)

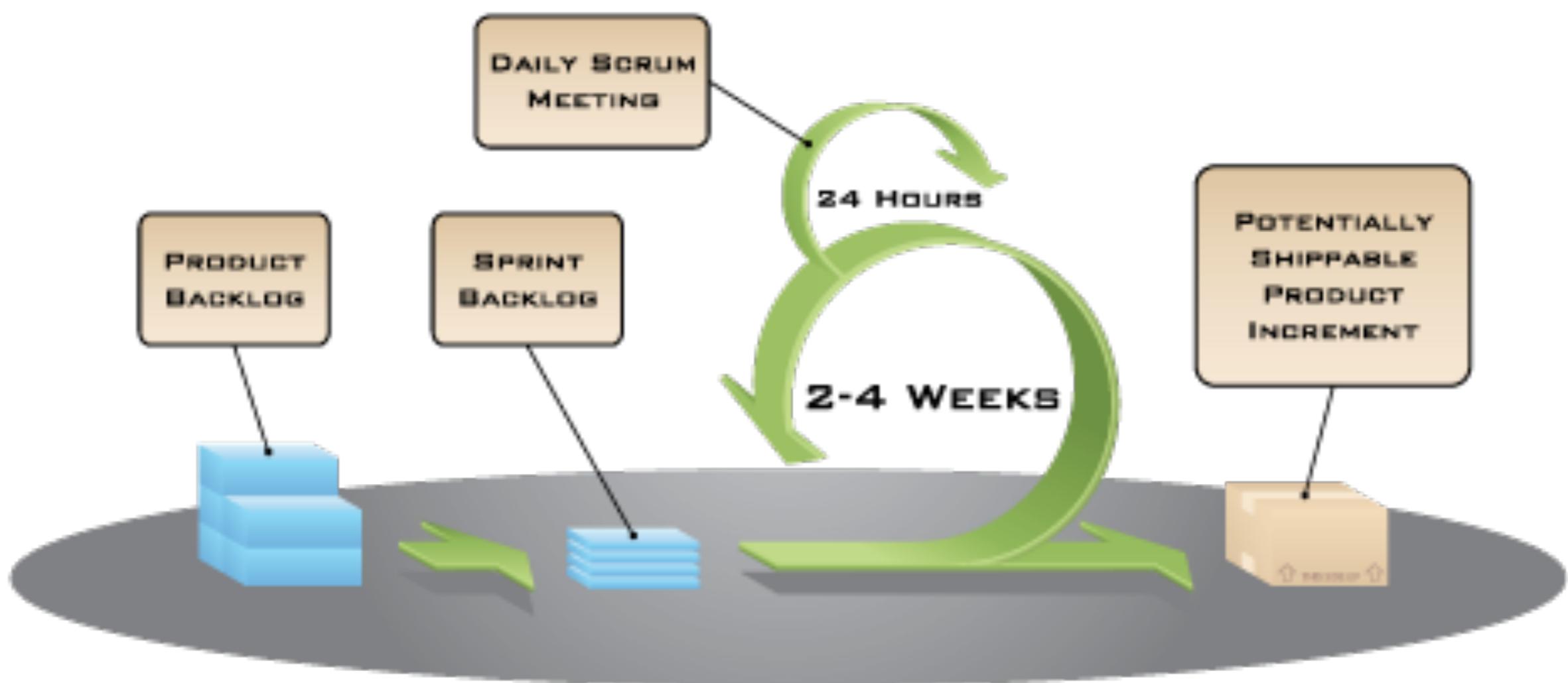
Men hvorfor går det altid galt med de statslige IT-projekter? To IT-professorer Søren Lausen fra IT Universitetet og Jan Pries-Heje fra Roskilde Universitet siger, at det ofte handler om et eller flere af de følgende **fire problemer**:

1. Kriterierne for, hvad **gevinsten** skal være, er ikke klart nok defineret i kravsspecifikationen, som er den juridiske bindende beskrivelse, hvor det er fastlagt, hvad leverandøren skal levere for at få sine penge.
2. Kravsspecifikationen beskriver, hvordan systemet skal bygges, men ikke hvilke **behov** systemet skal opfylde.
3. **Brugerne** bliver ikke inddraget eller hørt.
4. IT-projekterne tager så **lang tid at udvikle**, at brugerne har fået andre behov undervejs.

SCRUM

- en agil metode

Scrum

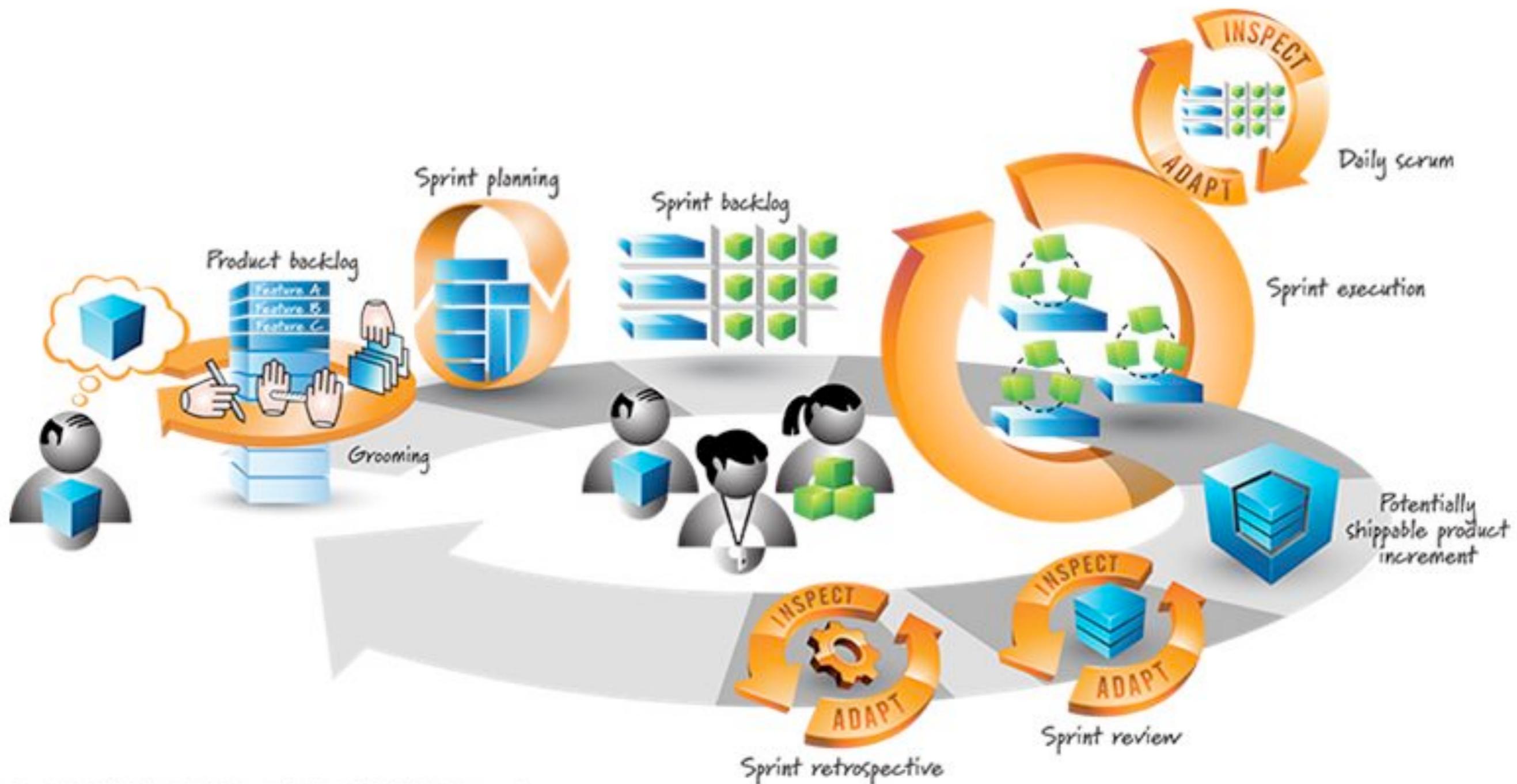


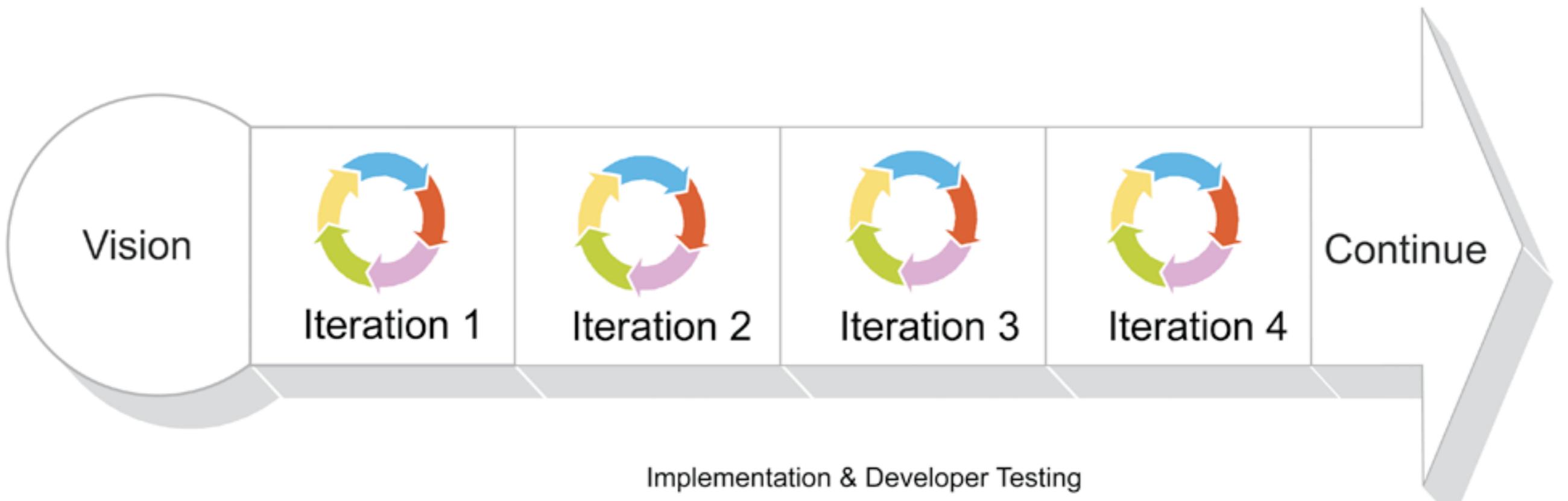
Begreber i Scrum

- Produkt
- Produkt ejer (rolle)
- Scrum master (rolle)
- Opgaver
- Product backlog
- Sprint
- Sprint start meeting (sprint planning)
- Sprint backlog
- Task board
- Burn down chart
- Daily Scrum meeting (stand up)
- Sprint review
- Sprint retrospective



Prozessen





Implementation & Developer Testing

Iteration Detail

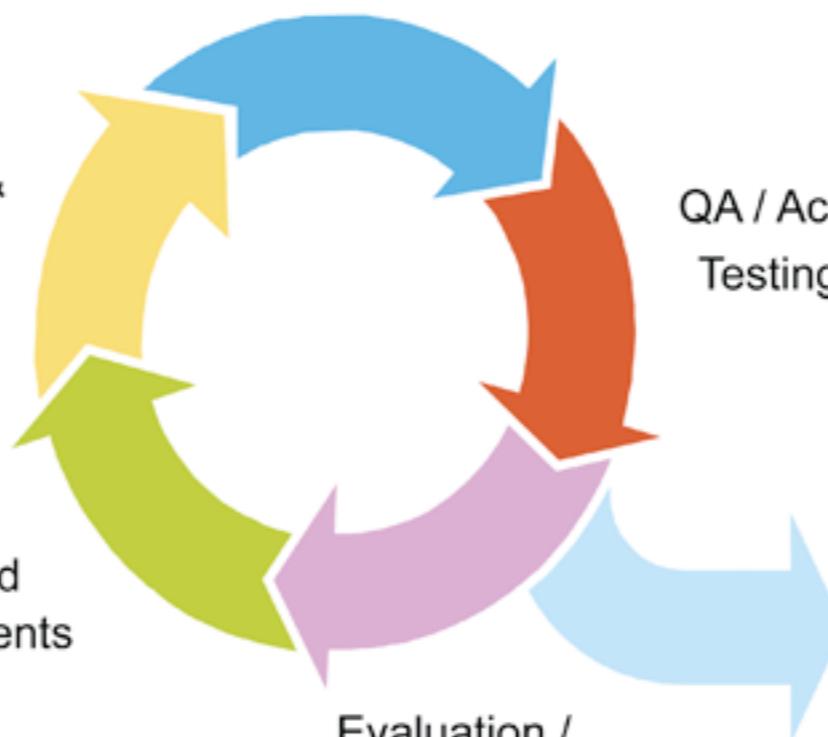
Design &
Analysis

Detailed
Requirements

Evaluation /
Prioritization

QA / Acceptance
Testing

(Deployment)



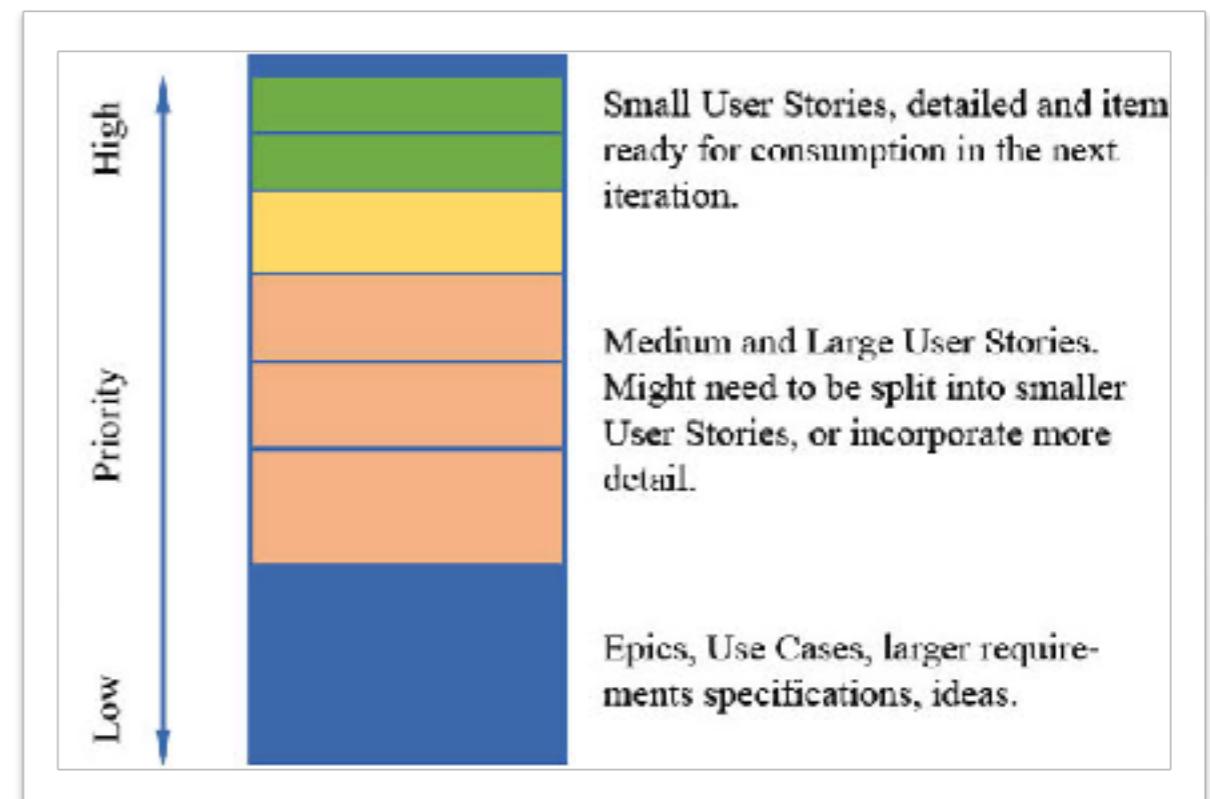
Tre artefakter

- Product backlog
 - User Stories
 - Fast format: Som _____ har jeg brug for _____ så _____
 - Sprint backlog
 - Burndown Chart

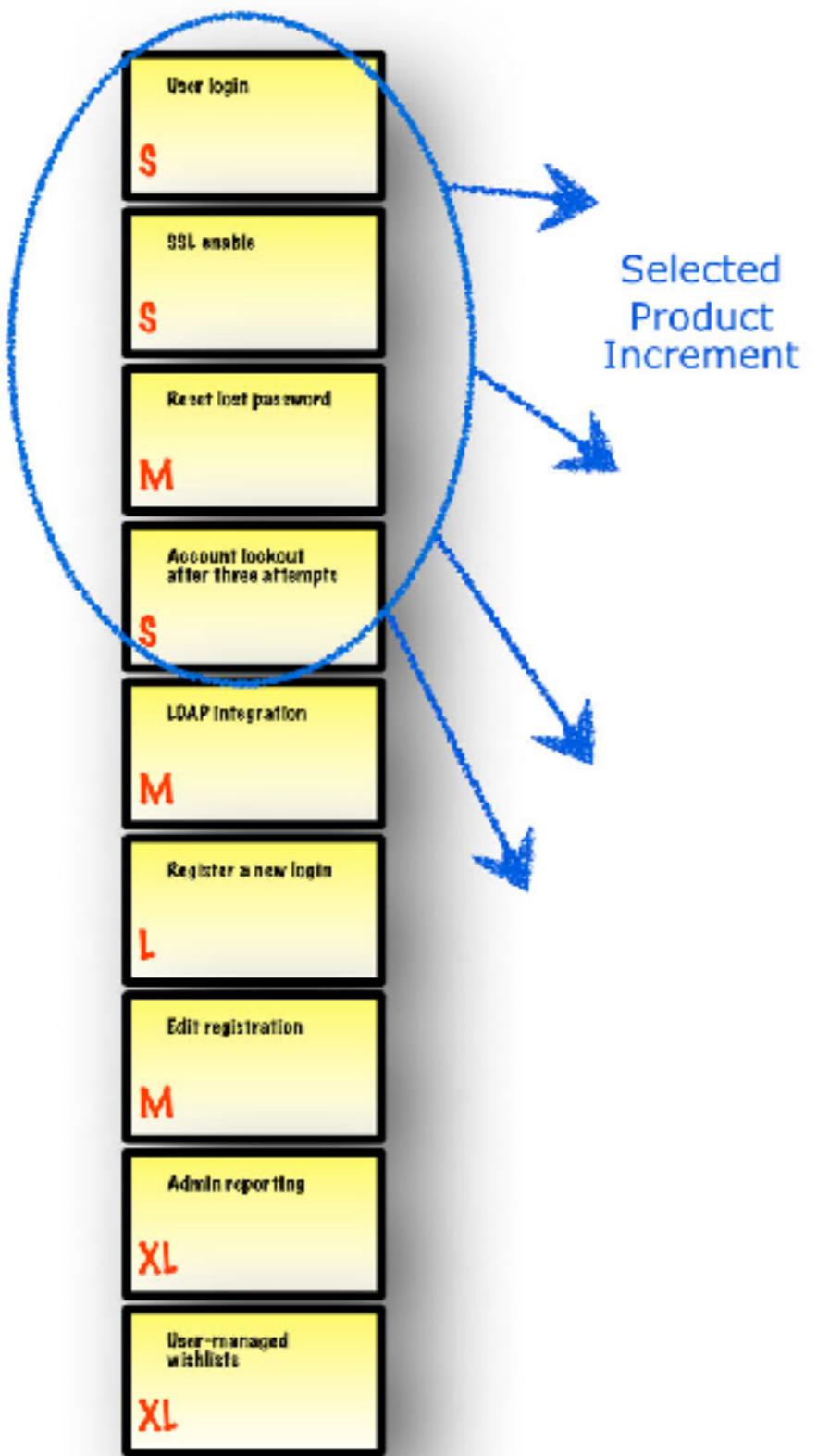
Stories	To Do		In Progress	Testing	Done
Filtration	Configure Alarming	Design Graphics	SFCx	Test Devices	Unit Design Description
	Engineer Control Loops	Batching System	EM 1	Confirm I/O	Generating Devices
			Unit Procedure	Confirm Hierarchy	
Blend Control	Vendor Comms	Unit Procedure	EM's	Control Module	Unit Design Description
	Network Config	Alarming	Design Graphics	Test Procedure	

Backlog

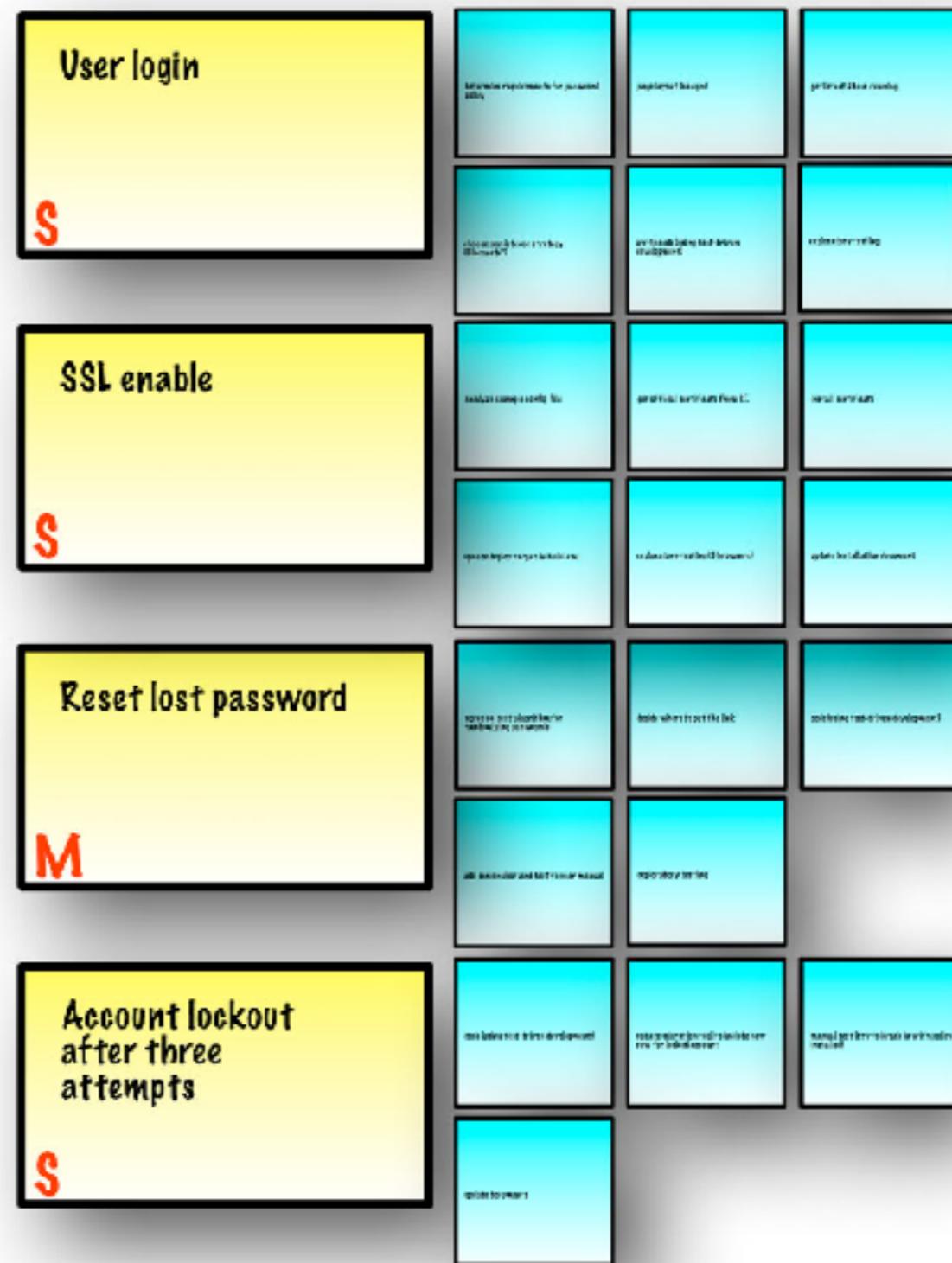
- Listen over ønsket funktionalitet
- Alle funktionaliteter er prioriterede
- Består af User stories
- Formuleres altid fra brugerens perspektiv
- Product owner kan fjerne og tilføje i backlog løbende
- Committede stories kan ikke røres
- Vedligeholdes ved “Grooming”



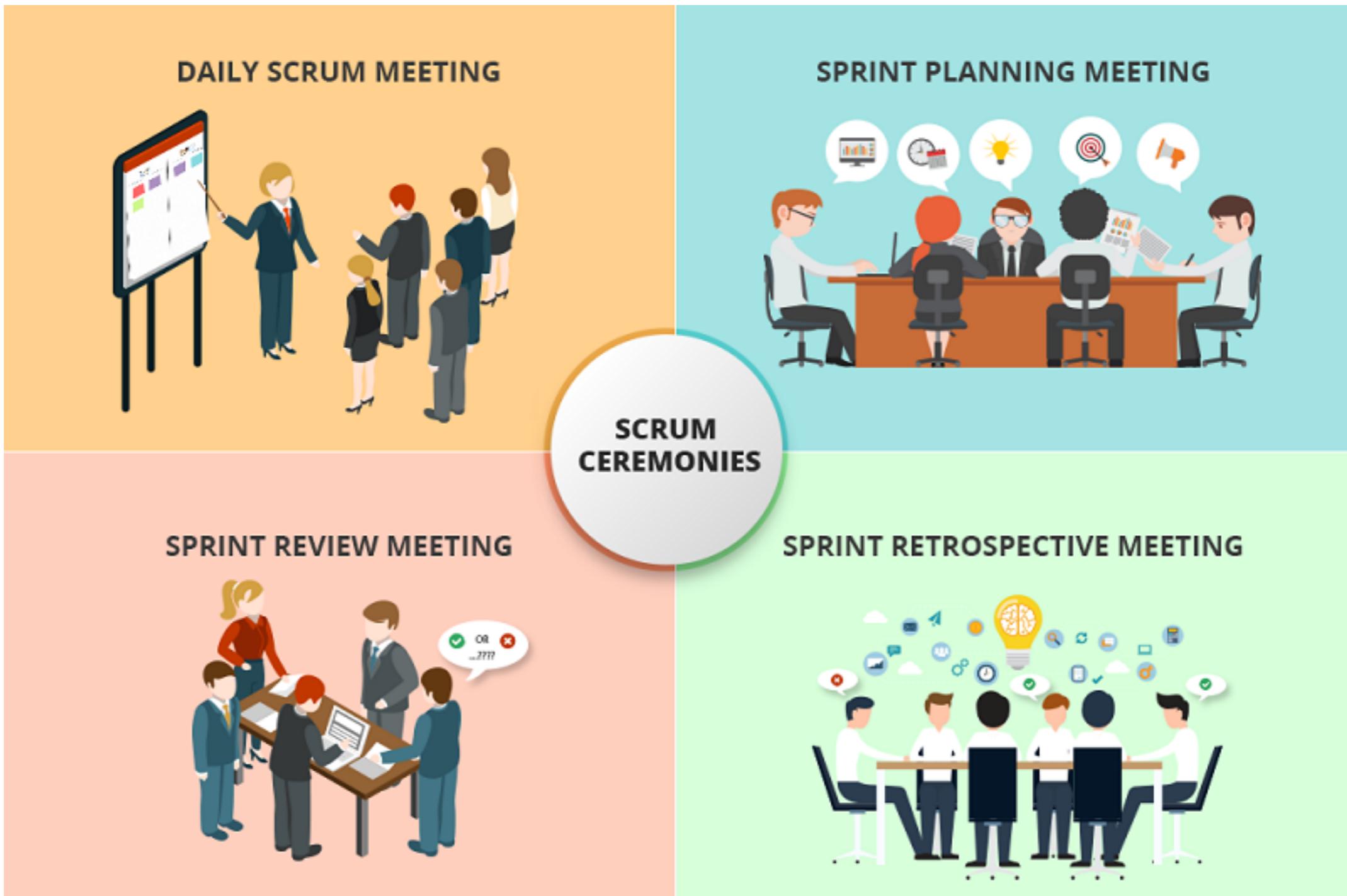
Product Backlog



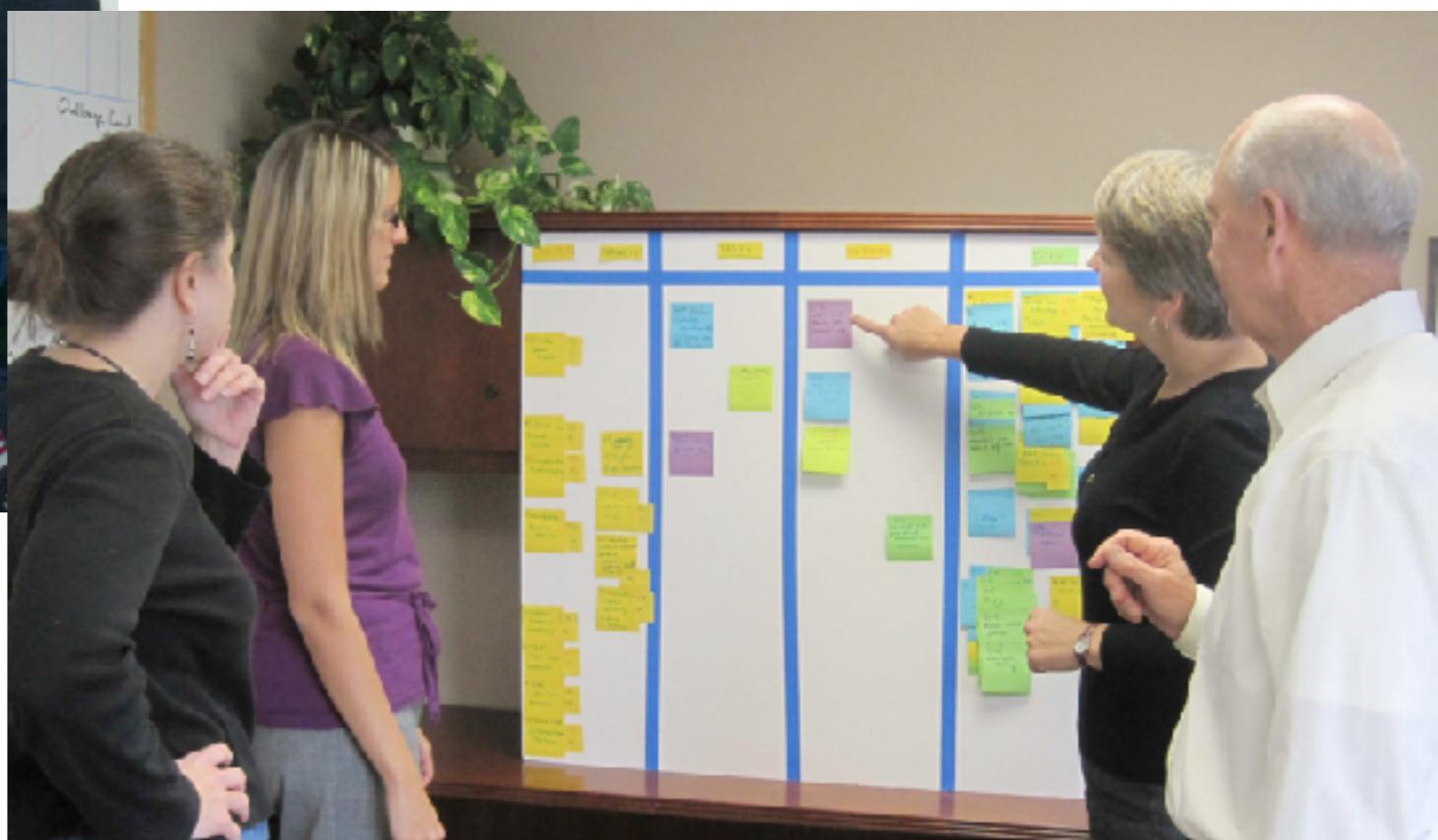
Sprint Backlog



Tre+1 ceremonier



Daily standup



<https://www.youtube.com/watch?v=P6v-l9VvTq4>

<http://www.lynda.com/Business-Project-Management-tutorials/Designing-running-your-stand-up-meetings/122428/147355-4.html>

Virkeligheden

- Mange bruger SCRUM
- Ofte i en lidt tilrettet version
- Der er situationer hvor lineære metoder er mest relevante
 - Risko/kritikalitet
 - Erfaring
 - Stabilitet
 - Kultur
 - Størrelse
- Det er ikke nødvendigvis enten/eller, men kan være både/og