

# Software Kanban: chances and challenges within a large scale lean/agile product development process

Alexander Gerber, SAP AG  
LKCE, Munich, October 2011

Internal

# Agenda

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- Setting the stage
- Why Kanban? How do we introduce it?
- The five Kanban core properties and how our teams implement them
- Q&A

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# SAP Corporate Profile – Facts & Figures

## SAP Development Locations



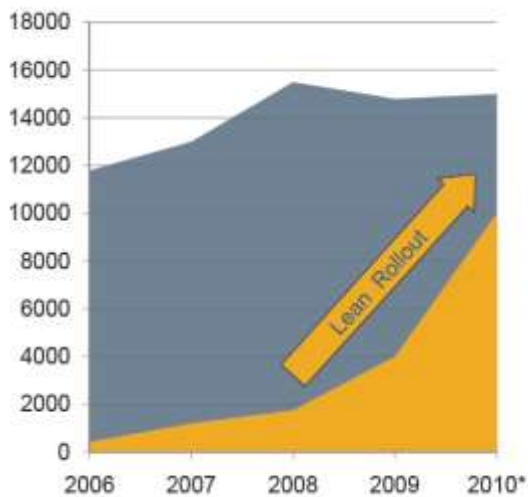
## SAP AG

- 48.000+ employees
- Presence in 50+ countries
- 100.000+ customers in 120+ countries
- € 12,00 billion revenue in 2010

## Products/Solutions

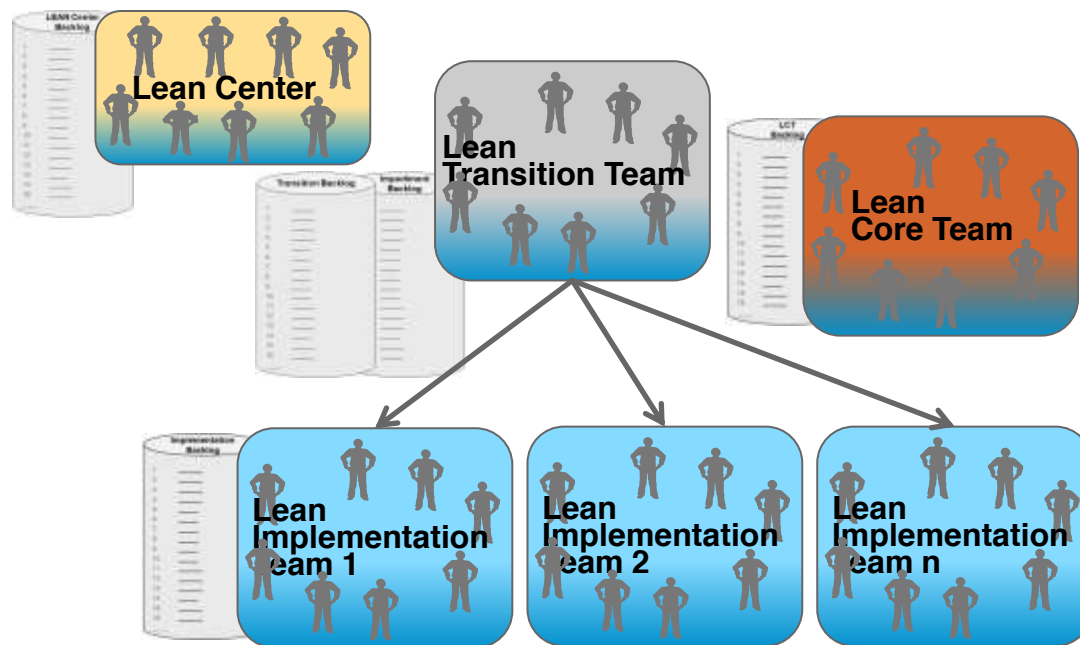
- 150+ Products and 40+ Solutions
- More than 25 Industry Solutions
- 30+ languages supported
- Approx. 500 developers work in parallel on a new release of a solution

# In order to get where we are, we involved many people in our organization and partly drove the transformation top down

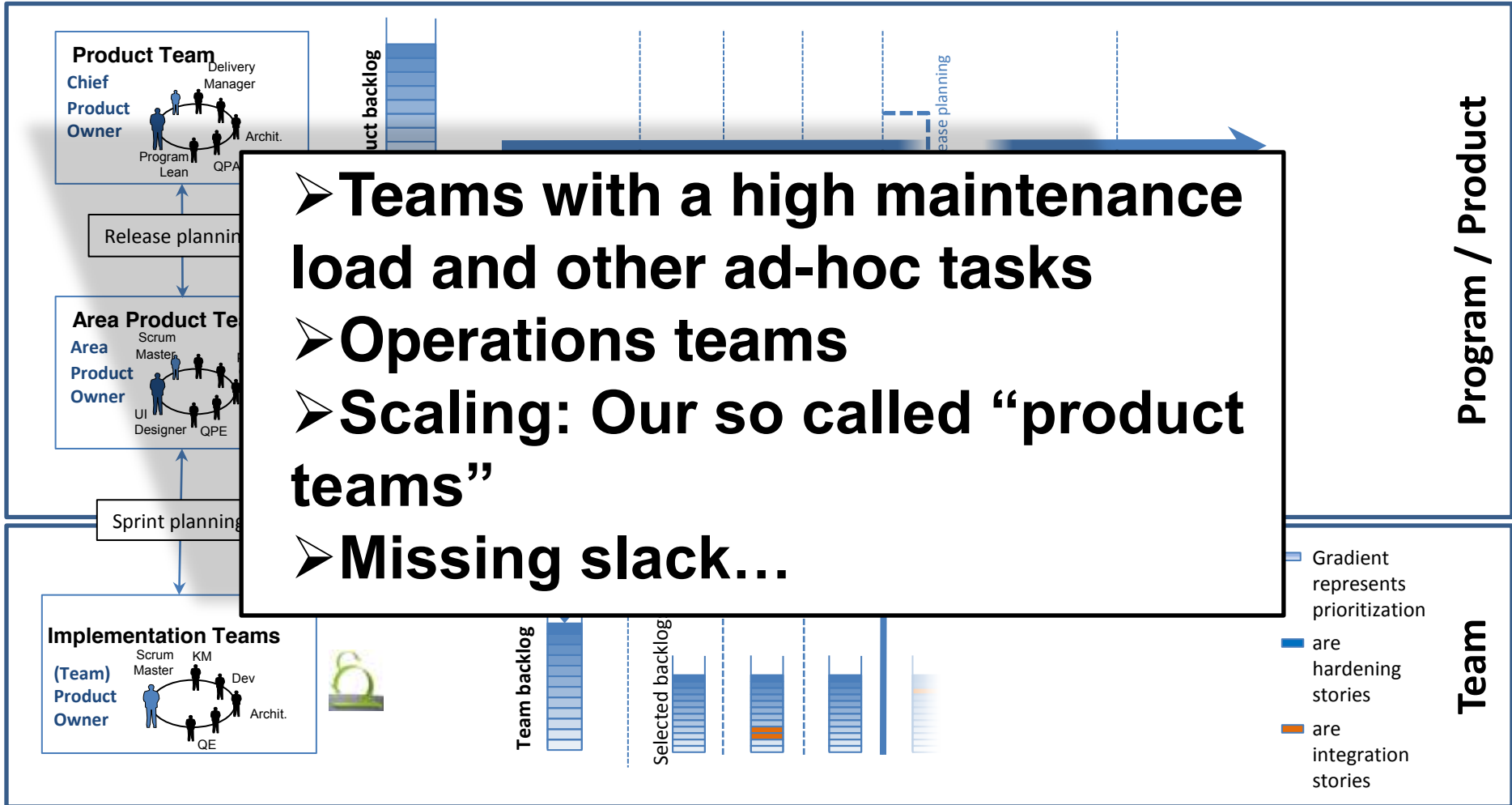


\*number of employees estimated

Number of employees  
■ Development  
■ Lean/Scrum



# Our lean development model in a nutshell



Based on: Leffingwell's big picture

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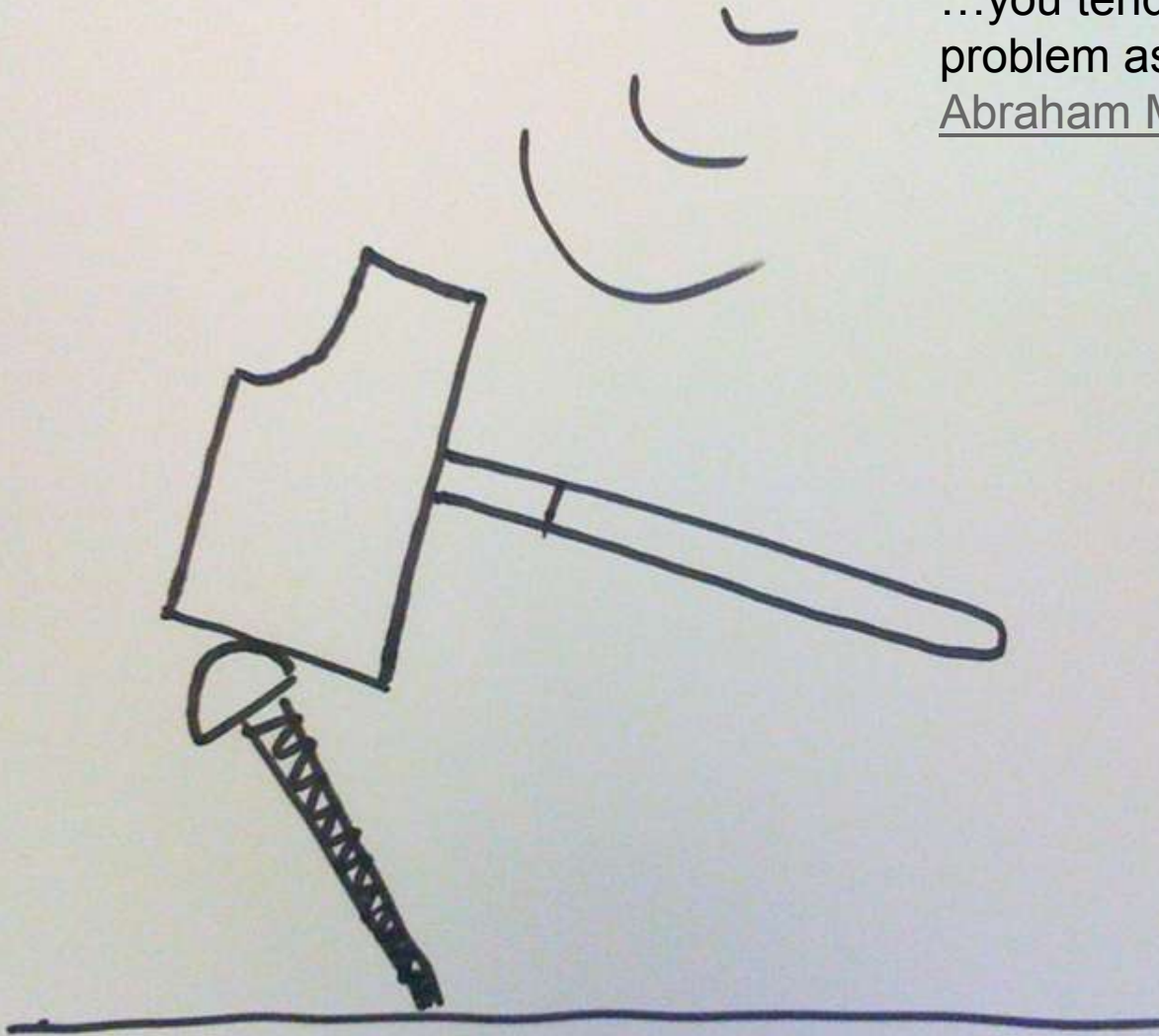
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If you only have a hammer...

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...you tend to see every  
problem as a nail.  
Abraham Maslow





# Three principles when starting with Kanban shall lead to minimal resistance against it

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➤ Start from where you currently are

➤ Agree with the others, that incremental improvement shall be achieved

➤ Respect the current process, including it's roles

„Kanban is an approach that drives change by optimizing your existing process. The essence of starting with Kanban is to change as little as possible.“ (p 63)

D. Anderson: Kanban

# We offer Kanban training, but we don't start a big roll-out

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➤ **Info Session**

➤ **Workshop**

➤ **Coaching**

„Kanban is not a software development lifecycle methodology [...]. It requires that some process is already in place so that Kanban can be applied to incrementally change the underlying process.“ (p 16)

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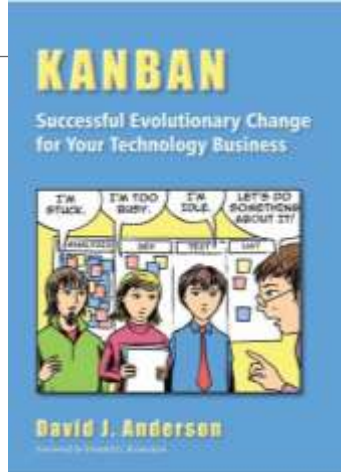
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# Five core properties for Kanban in Software Industry

Visualize the workflow

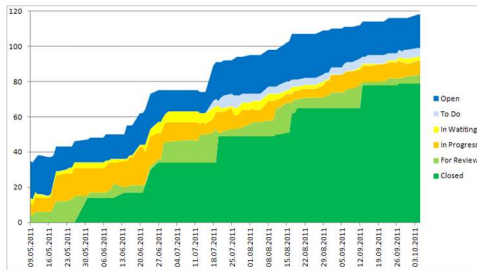


Limit work in progress



Make process policies explicit

Measure and manage flow



Use models to recognize improvement opportunities

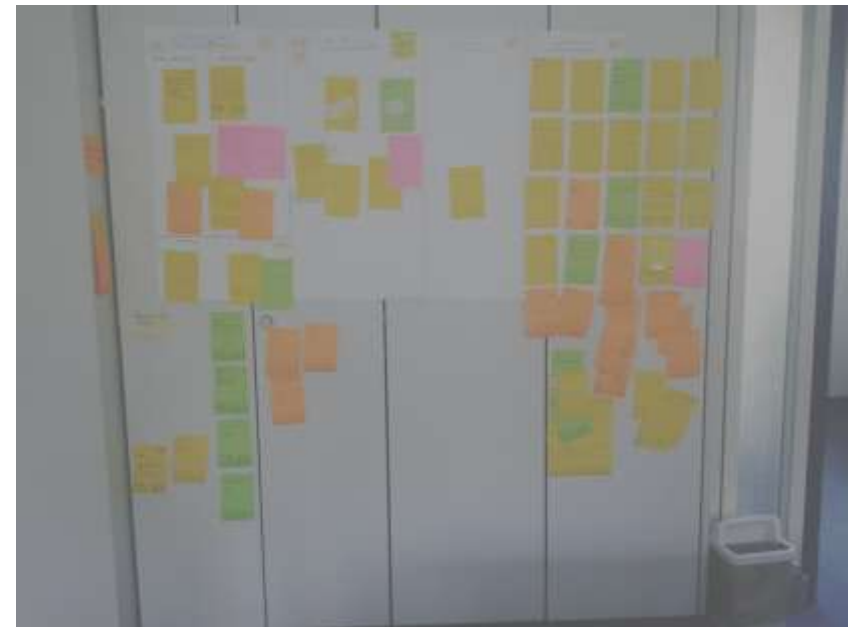


Team Charter	
Process Details	
Details 1	We want to
Roles	
Product Owner	Tasks
Coordinator	Tasks

# Visualize the Workflow

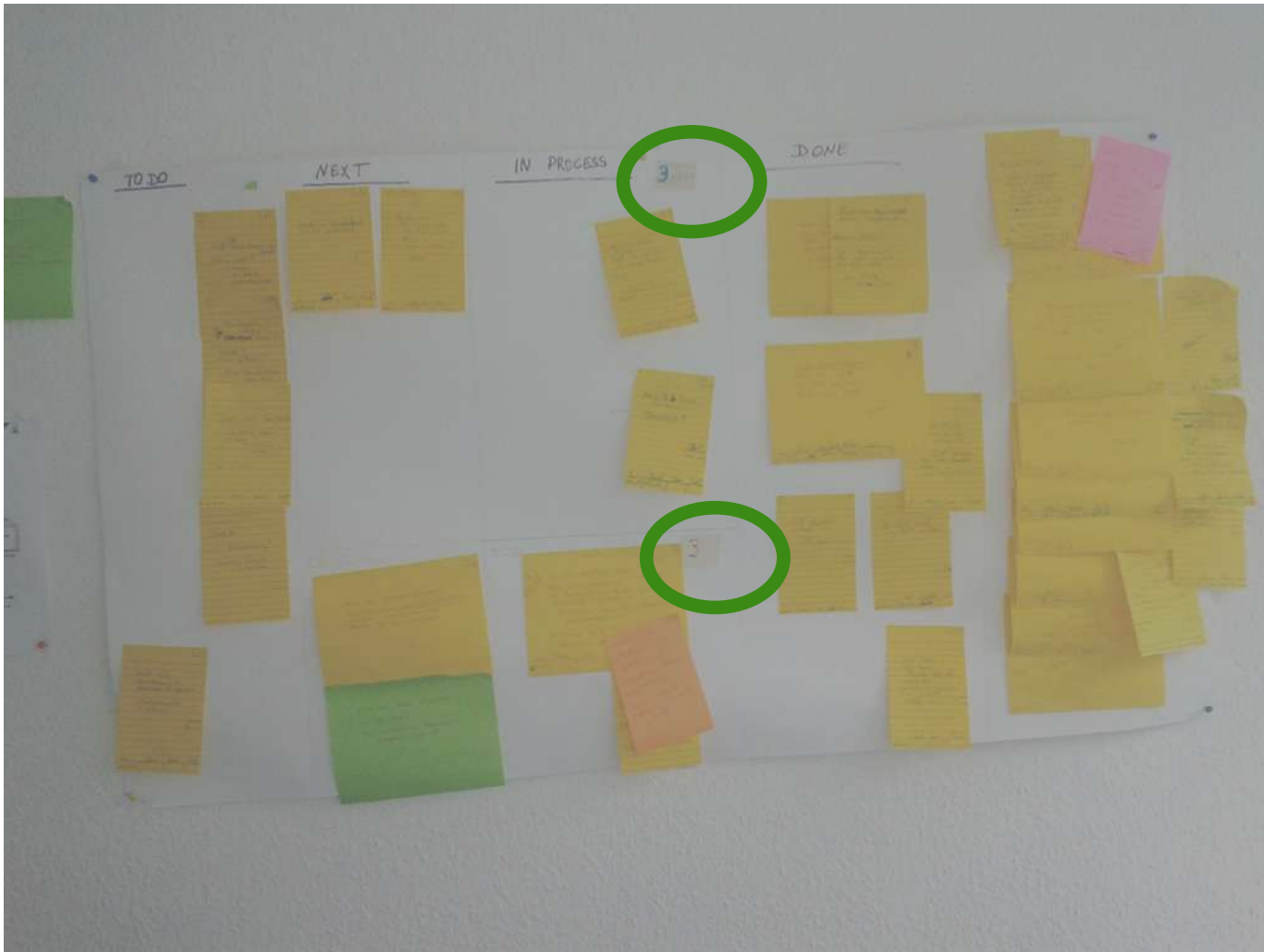


all teams have this

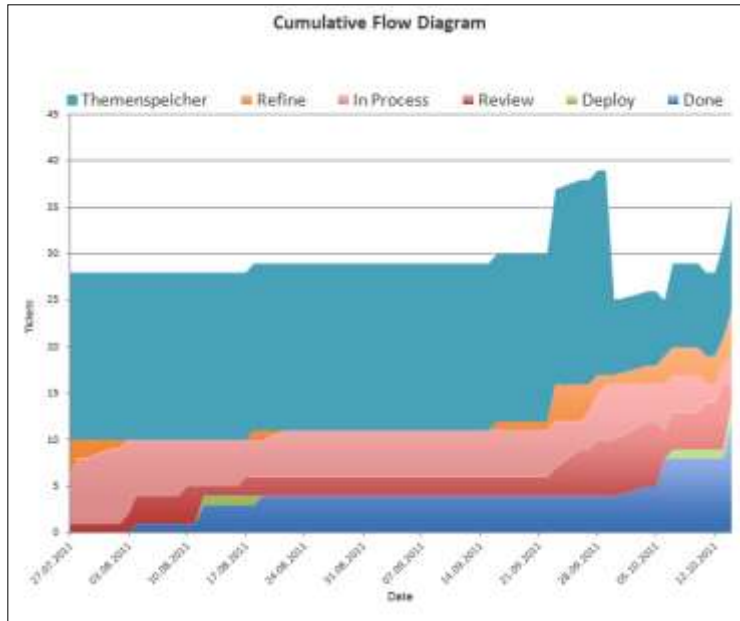


# Limit your work in progress

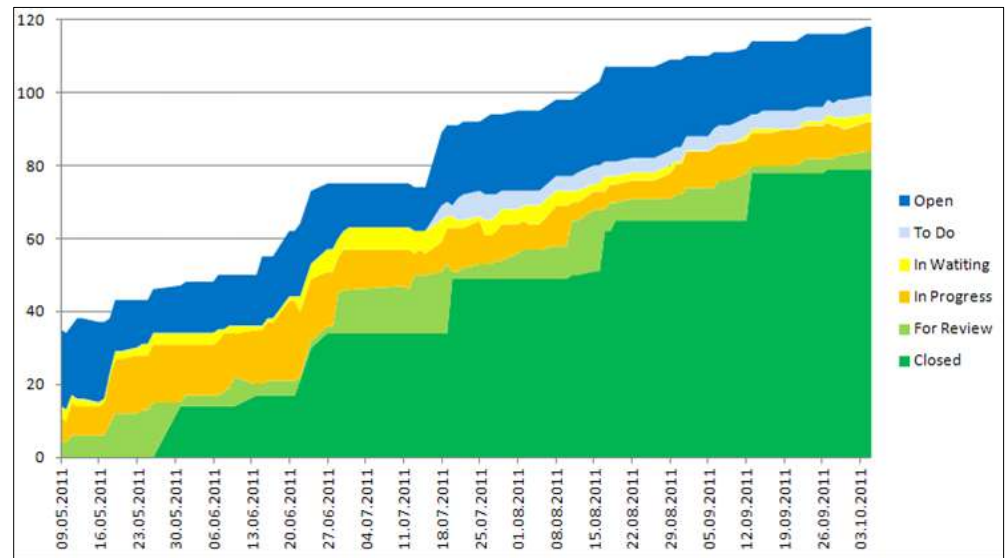
Most teams have this



# Measure and manage flow: cumulative flow charts



Some teams have this



# Make process policies explicit

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## ➤ **Mandatory**

- A facilitator role (e.g. keep ScrumMaster)
- Daily standup meetings
- Retrospectives

## **Cadences**

- Teams with dev tasks have to plug into the overall takt scheme (if they have development tasks)
- We see decoupled cadences for the other activities

## ➤ **For most teams**

- a Product Owner
- Cadence for planning

*Most teams have this*



# Use models to recognize improvement opportunities

*Some teams have this*

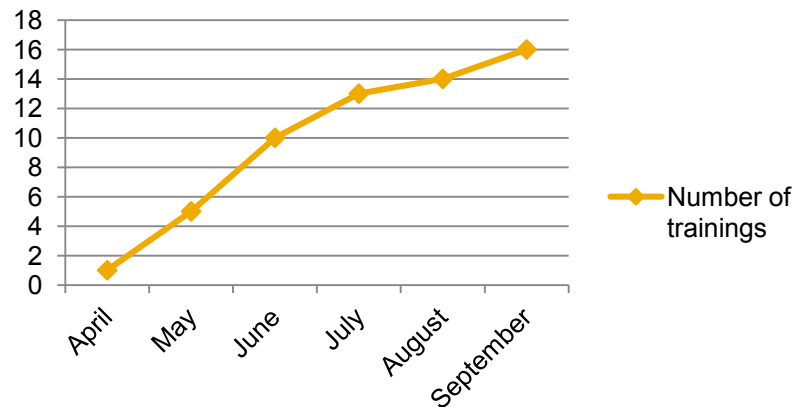
Discussing **value adding vs wasteful** activities probably comes closest to this



# Some figures related to our Kanban adoption

- **At least 15 teams say they use Kanban**
- **Kanban introduction failed in some teams; reasons:**
  - Not keen at all on any defined „method“
  - Distributed team (electronic tool)
  - No time for process discussions
- **Current discussion: experiment with Kanban in teams which complain about missing slack**

**Number of trainings since April 2011**



# Summary of findings

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*keep in mind: no claim that  
results can be generalized*

- **Attractive approach for maintenance, service and operations teams**
- **Not sure whether resistance against Kanban lower than against more rigid methods (like Scrum)**
- **Fits very well into a context where lean principles are already known**
- **Building upon already established agile roles helped us**
- **By giving structure to an iteration, Kanban helps addressing issues that some agile teams struggle with (e.g. too much parallel work)**
- **We consider Kanban a tool in our tool box that we apply in some contexts (but not all)**



# Thank You!

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