



Project Management

Requirements Management



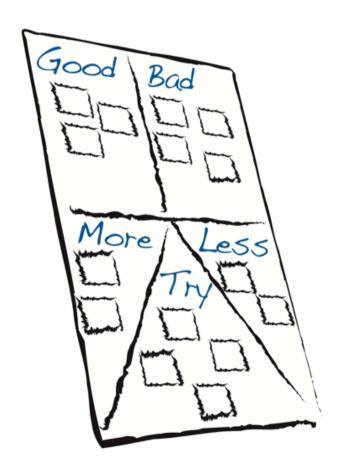


Exercise:

Do a retrospective for your teaching group – at the end of your session.

Task:

- 20 min, as teaching group
- Decide on a moderator (ScrumMaster) who moderates the retrospective
- Do the retrospective on "How did the last teaching group session go?"
- Hint: A retrospective has 4 steps:
 - » Brainstorm: What was good, what made you sad in the teaching group session?
 - » Brainstorm: What could you do more, do less, try out in the next teaching group?
 - » Decide: what will you really do in the next teaching group session?
 - » Give the moderator feedback





Requirements Management in CMMI

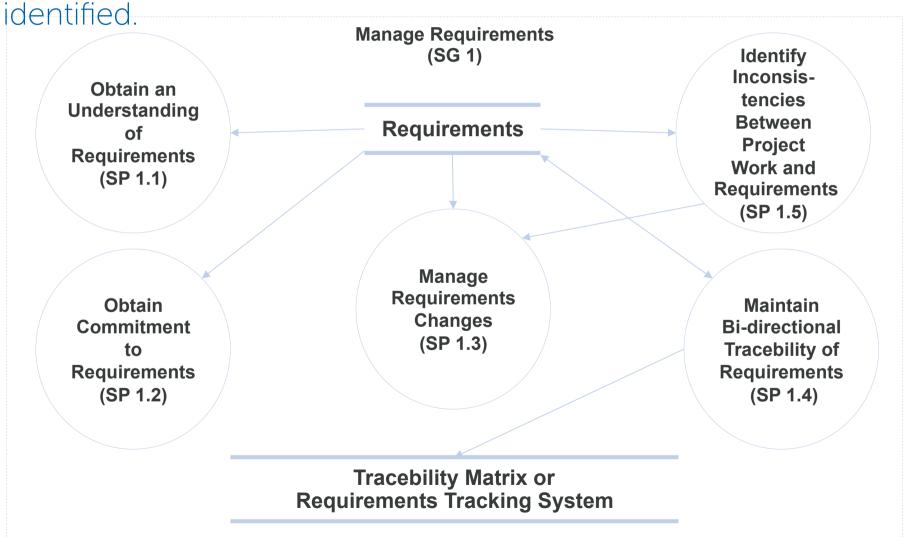


The purpose of 'Requirements Management' is to manage the requirements of the project's products and product components and to identify inconsistencies between those requirements and the project's plans and work products

Manage Requirements (SG 1)



'Mange Requirements' means that requirements are managed and inconsistencies with project plans and work products are





Requirements Management helps to answer important questions

- SP 1.1: Customer defines and agrees to requirements
- SP 1.2: Team agrees to requirements
- SP 1.3: Requirement changes are managed
- SP 1.4: Requirements are mapped to work products
- SP 1.5: The Mapping is used to identify inconsistencies between project work and requirements

- What are the requirements?
- Did we understand the requirements and can we build it?
- Anything new?
- What work products depend on which requirement? Which requirements have been included in this release?
- Any requirement not yet implemented? Any code that does not have a requirement?

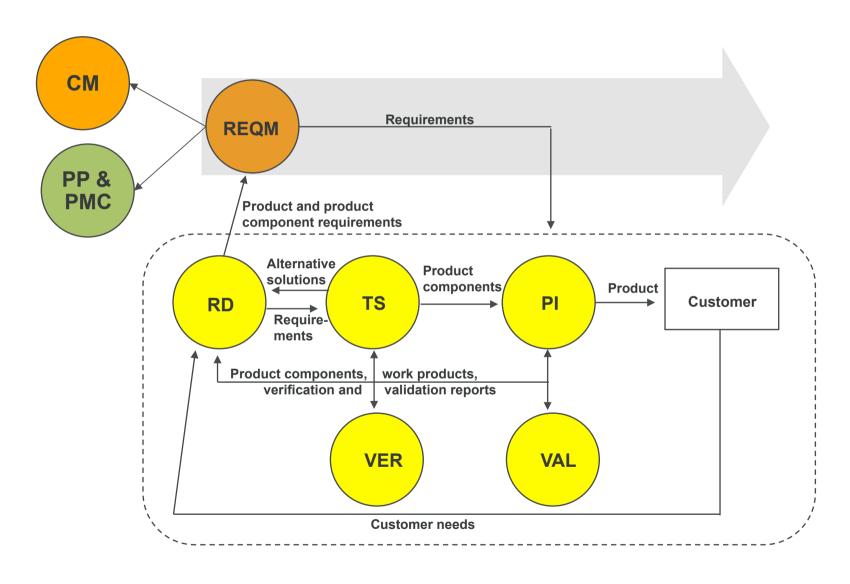


Why do we do Requirements Management?

- Define and control scope of the project.
- Gain consensus with customer on what to develop.
- Relate project's work to requirements.



Requirements Management in context





Who is responsible for managing the requirements?

- RUP: Project Manager
 - » The Project Manager plans, manages and allocates resources, shapes priorities, coordinates interactions with customers and users, and keeps the project team focused.
- Scrum:
 - » The Product Owner creates the product vision and defines the features
 - » Team commits to requirements
 - » Team and Product Owner maintain traceability
 - » Team and Product Owner identify inconsistencies between project work and requirements



Requirements Management in Scrum



How Scrum implements CMMI REQM.SP 1.1 Obtain an understanding of requirements

Product Owner writes and prioritizes the Product Backlog items (user stories) according to their business value continuously.

Product Owner and Team discuss Product Vision and Product Backlog in Product Backlog Refinement and Sprint Planning.

Product Owner and Team agree on Definition of Done in Product Backlog Refinement and Sprint Planning. The Definition of Done contains non-functional requirements, quality requirements, organizational constraints and functional requirements that apply to every Product Backlog item.



How Scrum implements CMMI REQM.SP 1.2 Obtain Commitment to Requirement

The Team agrees to the Selected Product Backlog (which it can commit to deliver in the next Sprint, based on the Definition of Done) in the Sprint Planning meeting.



How Scrum implements CMMI REQM.SP 1.3 Manage requirements changes

The Product Owner adds, reprioritizes or drops items (user stories) to the Product Backlog continuously/during Product Backlog Refinement.

The Team suggests Product Backlog items (user stories) to the Product Owner (or changes to the Definition of Done) continuously.

The Product Owner agrees to neither change the Selected Product Backlog nor the Definition of Done during the Sprint.

Product Owner and the Team discuss the changes to the Product Backlog (or the Definition of Done) in the Sprint Planning or Product Backlog Refinement



How Scrum implements CMMI REQM.SP 1.3 REQM.SP 1.4 Maintain bidirectional traceability

The Product Owner maintains the Product Backlog items in a hierarchy of epics and user stories (vertical traceability).

The Team maps each task to a Product Backlog item (horizontal traceability).

REQM.SP 1.5 Identify inconsistencies between project work and requirements The Team presents for each Selected Product Backlog item (user story) whether the Potentially Shippable Product Increment meets the requirements according to the Definition of Done. The Product Owner reviews each item and accepts it. This is performed in the Sprint Review.

The Team works only on tasks that are in the Sprint Backlog and that map to a Selected Product Backlog item during the Sprint.

The Team monitors the fulfillment of the Selected Product Backlog items by monitoring the remaining effort shown in the Sprint Burndown Chart during the Sprint.

Fully



How Scrum implements CMMI REQM.SP 1.5 Identify inconsistencies between project work and requirements

The Team presents for each Selected Product Backlog item whether the Product Increment meets the requirements according to the Definition of Done. The Product Owner reviews each item and accepts it.

Stakeholders review the product increment in the Sprint Review.

The Team works only on tasks that are in the Sprint Backlog and that map to a Selected Product Backlog item during the Sprint. The team checks this in the Daily Scrum.

The Team monitors the fulfillment of the Selected Product Backlog items by monitoring the remaining effort shown in the Sprint Burndown Chart during the Sprint.

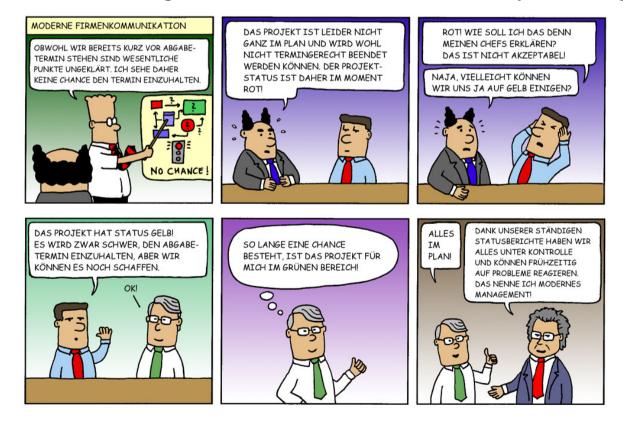


Generic Practices



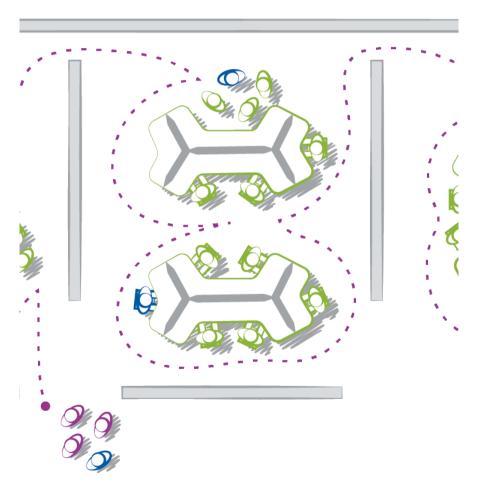
Generic Practices

- Important: Generic Practices must be applied and interpreted for each Process Area
- GP 2.10: Senior Management Reviews are real reviews, not just reading reports





An Scrum-way to implement GP 2.10 Senior Management Reviews: Go to Gemba



Go to gemba means to go and see what is really happening rather than talk about it, read about it, or try to recall it from memory.

A gemba walk is a form of management in which leaders walk around the work area to gain firsthand insight into how processes are done.

In a Scrum environment, senior managers could go and visit each team when they do the Daily Scrum.







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Revision History

Rev. #	Status	Date	Description	Responsible
1.0	Finished	03.10.2004	Initial version	Malte Foegen
1.1	Finished	21.01.2006	Revision History added, current template	Malte Foegen
1.2	Finished	23.12.2007	Layout update	Malte Foegen
1.3	Finished	18.01.2008	Added some extra explanation	Malte Foegen
1.4	Finished	23.01.2009	Updated exercise	Malte Foegen
1.5	Finished	18.01.2010	Updated layout	Malte Foegen
1.6	Finished	15.01.2011	New exercise, shortened	Malte Foegen
2.0	Finished	03.02.2012	Update of exercises	Malte Foegen
2.1	Finished	11.01.2013	Update of exercises, added Retro exercise and team cycle	Malte Foegen
2.2	Finished	8.1.2014	Added explanation for retro	Malte Foegen
2.3	Finished	21.01.2015	New Layout, shortened, added Scrum-CMMI, added go to gemba	Malte Foegen