Comparing and Contrasting the PP and PMC Process Areas of CMMI v 1.2 and Scrum

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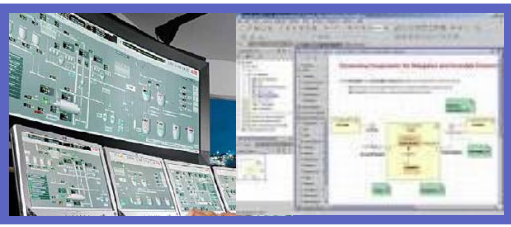

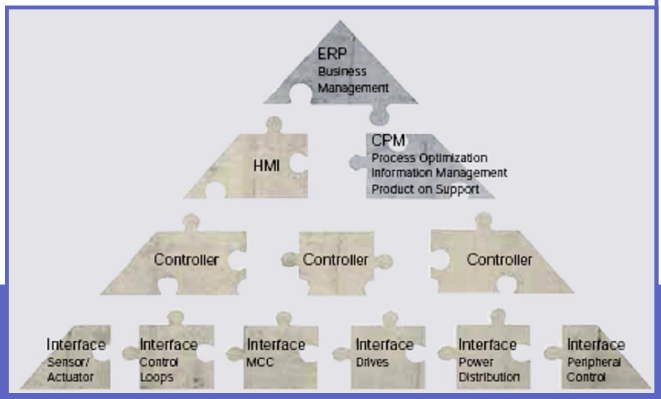

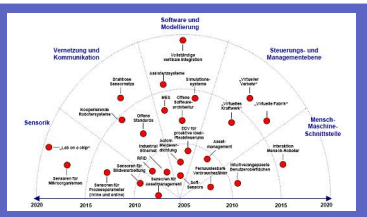

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- SCRUM is based on the principle that software development is an empirical process, not a defined process, and that if you try to manage an empirical process with a system designed for defined processes, you are doomed to fail.
- SCRUM ñexpects the unexpectedò and ñcontrol is exercised through frequent inspection and adaptationò
- SCRUM is a borrowed term from ñRugbyò
- It claims to be CMMI Maturity Level 3 compliant

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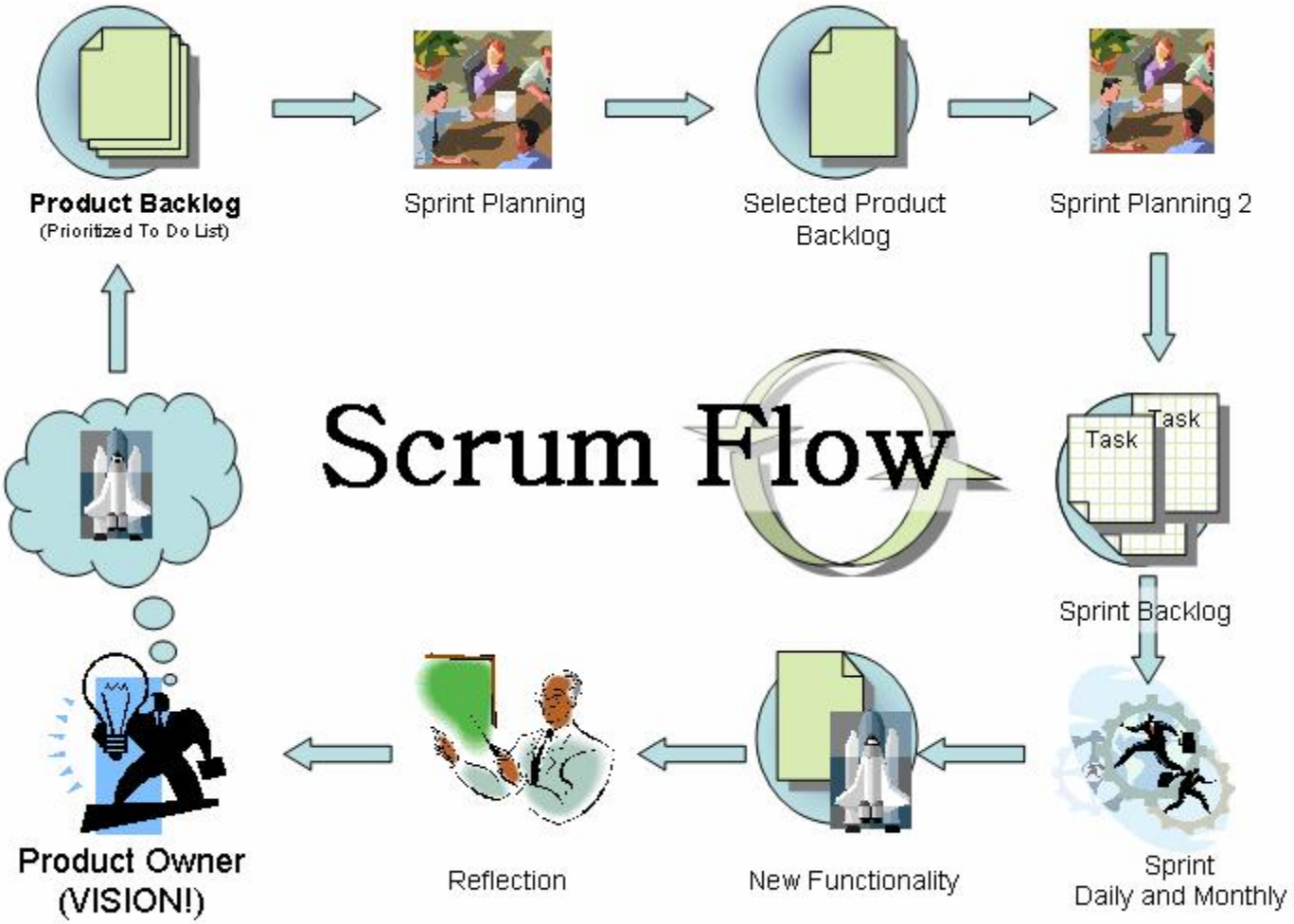
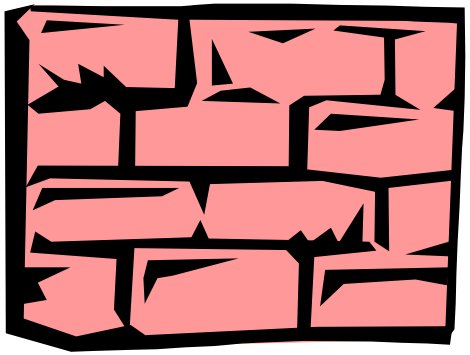
m Flow



Phases



- Planning
  - Initial requirements
  - Initial release planning
  - Architectural and business vision
  - Establishment of ROI gauges with initial funding
- Staging
  - Addition of non-functional requirements to project ñbacklogò
  - Route maps
- Development
  - 30-day ñsprintsò
  - 1 day bursts of implementation
- Release
  - Enough usable functionality is developed, or
  - Release date is achieved

Establish Estimates

Scrum

Product backlog: prioritized product features desired by the customer

Sprint backlog: (30 days) tasks to create Increment. Lifecycle is evolutionary.

Estimates are established for sprint backlog

CMMI

Top level WBS: work packages, task descriptions

Evolutions can be also considered in the definition of the project lifecycle

Estimates are determined for complete WBS

Develop a Project Plan

Scrum	CMMI
Budget is agreed at the beginning of the project and revised at each iteration. Product Owner manages ROI; business decision at the end of the sprint on project continuation. **Sprints** deliver results every 30 days **Daily Scrum meetings** held every 24 hours	**Establish budget and schedule** and maintain it
Project risks are analyzed and evaluated daily	**Identify project risks**
Project data primarily includes **product backlog, sprint backlog, product increment**	**Plan for management of project data**
Project resources discussed at **Sprint Planning Meeting** and **Daily Scrums**	**Plan for project resources,** knowledge and skills, and planning for stakeholder involvement
Product backlog and sprint backlog act as the project plan	Establish and maintain the overall **Project Plan**

Obtain Commitment to the Plan

Scrum

Product backlog and sprint backlog act as the project plan

Sprint planning reconciles resources. **Daily Scrum** meetings revises resource needs

Plan commitment obtained at Sprints and Daily Scrums; team as a whole owns the sprint plan, and commits to meet it

CMMI

Review all plans that affect the project

Reconcile work and resource levels

Obtain plan commitment

Monitor Project Against Plan

Scrum

Use backlog to monitor progress and commitments.

Volunteerism used as work load balancing

Discuss **risks** and **issues** and remove **impediments** at **Daily Scrum meetings**

Monitoring done at **Daily Scrum** and **Sprint planning meetings**

Stakeholder involvement monitored at **Daily Scrum meetings**

Progress and milestone reviews conducted during the **Daily Scrum and Sprint planning** meetings

CMMI

Monitor project planning indicators of project progress

Monitor **commitments**

Monitor project **risks**

Monitor data management

Monitor stakeholder involvement

Conduct **progress and milestone** reviews

Manage Corrective Action to Closure

Scrum

Done at **Daily Scrum** and **Sprint planning meetings**

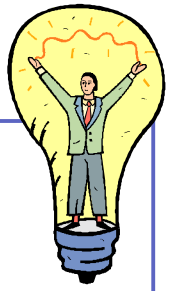
Corrective actions taken and managed to closure primarily at **Daily Scrum meetings**

CMMI

Analyze issues to determine **corrective actions**

Take **corrective actions** on identified issues.
Manage **corrective actions** to closure

m “Home Ground”



- Meeting highly volatile customer needs (requirements)
- Managing tighter dependencies among team memberŝ work
- Having co-located teams
- Coping with shorter planning horizons
- Building ñjust enoughòsoftware functionality, and then ending the project
- Having a small development team

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