Project Monitoring & Control

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Agenda

- Project Monitoring and Control in CMMI
- How do we attain in Scrum
- Real examples

Monitoring and Controlling

- Monitoring – collecting, recording, and reporting information concerning project performance that project manager and others wish to know

- Controlling – uses data from monitor activity to bring actual performance to planned performance

What?

- It is a process consisting of all those activities that ensure that the approved project is going to be delivered in time, budget, required quality and with marginal risk involved

- It revolves around verification, validation and monitoring the considerable changes in the plan and the equivalent action control taken by the team for a corrective measure

Goals in CMMI

Monitor Project Against Plan (SG1)

Manage Corrective action to Closure (SG2)

Achieve specific goals (GG1)

Institutionalize a Managed Process (GG2)

Institutionalize a Defined Process (GG3)

Institutionalize a Quantitatively Managed Process (GG4)

Institutionalize an Optimizing Process (GG5)

SG1:Monitor Project against the Plan

SP 1.1	**Monitor Project Planning Parameters** *Monitor the actual values of the project planning parameters against the project plan*
SP 1.2	**Monitor Commitments** *Monitor commitments against those identified in the project plan*
SP 1.3	**Monitor Project Risks** *Monitor risks against those identified in the project plan*
SP 1.4	**Monitor Data Management** *Monitor the management of project data against the project plan*
SP 1.5	**Monitor Stakeholder involvement** *Monitor stakeholder involvement against the project plan*

SP 1.6	**Conduct Progress reviews** *Periodically review the project's progress, performance, and issues*

Project Progress Report

Milestone Reviews Report

SP 1.7	**Conduct Milestone reviews** *Review the accomplishments and results of the project at selected project milestones*

SG2: Manage Corrective Action to Closure

Milestone
Reviews
Report

SP 2.1	**Analyze Issues** *Collect and analyze the issues and determine the corrective actions necessary to address the issues*

WHY?

Actions

SP 2.2	**Take Correction Action** *Take corrective action on identified issues*

SP 2.3	**Manage Corrective Action** *Manage corrective actions to closure*

GG1 Achieve Specific Goals

The process supports and enables achievement of the specific goals of the process area by transforming identifiable input work products to produce identifiable output work products

- **GP 1.1 Perform Specific Practices**

GG2 Institutionalize a Managed Process

The process is institutionalized as a managed process

- **GP 2.1 Establish an Organizational Policy**
- **GP 2.2 Plan the Process**
- **GP 2.3 Provide Resources**
- **GP 2.4 Assign Responsibility**
- **GP 2.5 Train People**
- **GP 2.6 Manage Configurations**
- **GP 2.7 Identify and Involve Relevant Stakeholders**
- **GP 2.8 Monitor and Control the Process**
- **GP 2.9 Objectively Evaluate Adherence**
- **GP 2.10 Review Status with Higher Level Management**

GG3 Institutionalize a Defined Process

The process is institutionalized as a defined process.
This generic goal's appearance here reflects its location in the continuous representation

- **GP 3.1 Establish a Defined Process**
- **GP 3.2 Collect Improvement Information**

GG4 Institutionalize a Quantitatively Managed Process

The process is institutionalized as a defined process.
This generic goal's appearance here reflects its location in the continuous representation

- **GP 4.1 Establish Quantitative Objectives for the Process**
- **GP 4.2 Stabilize Subprocess Performance**

GG5 Institutionalize an Optimizing Process

The process is institutionalized as an optimizing process

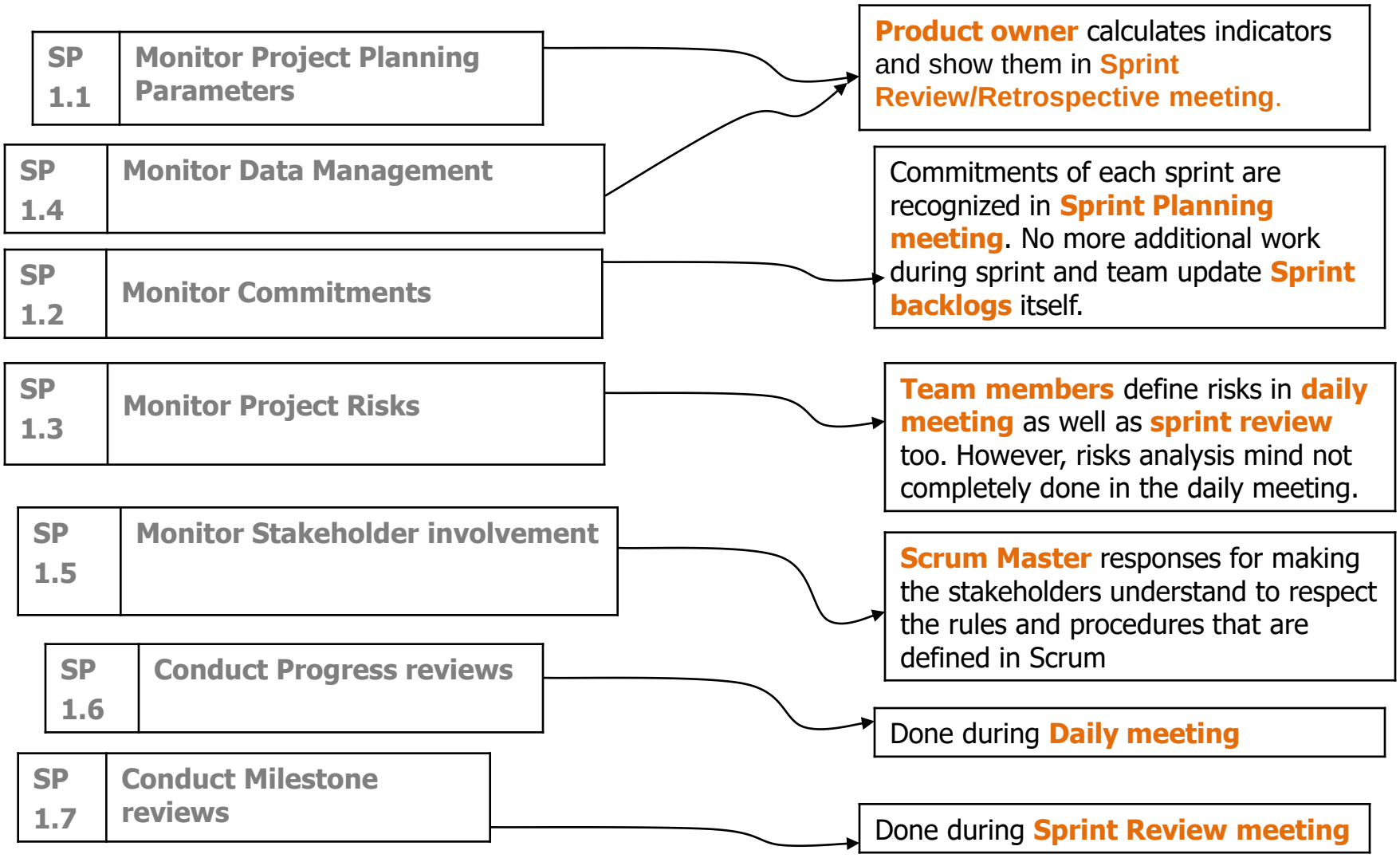
- **GP 5.1 Ensure Continuous Process Improvement**
- **GP 5.2 Correct Root Causes of Problems**

Typical work products

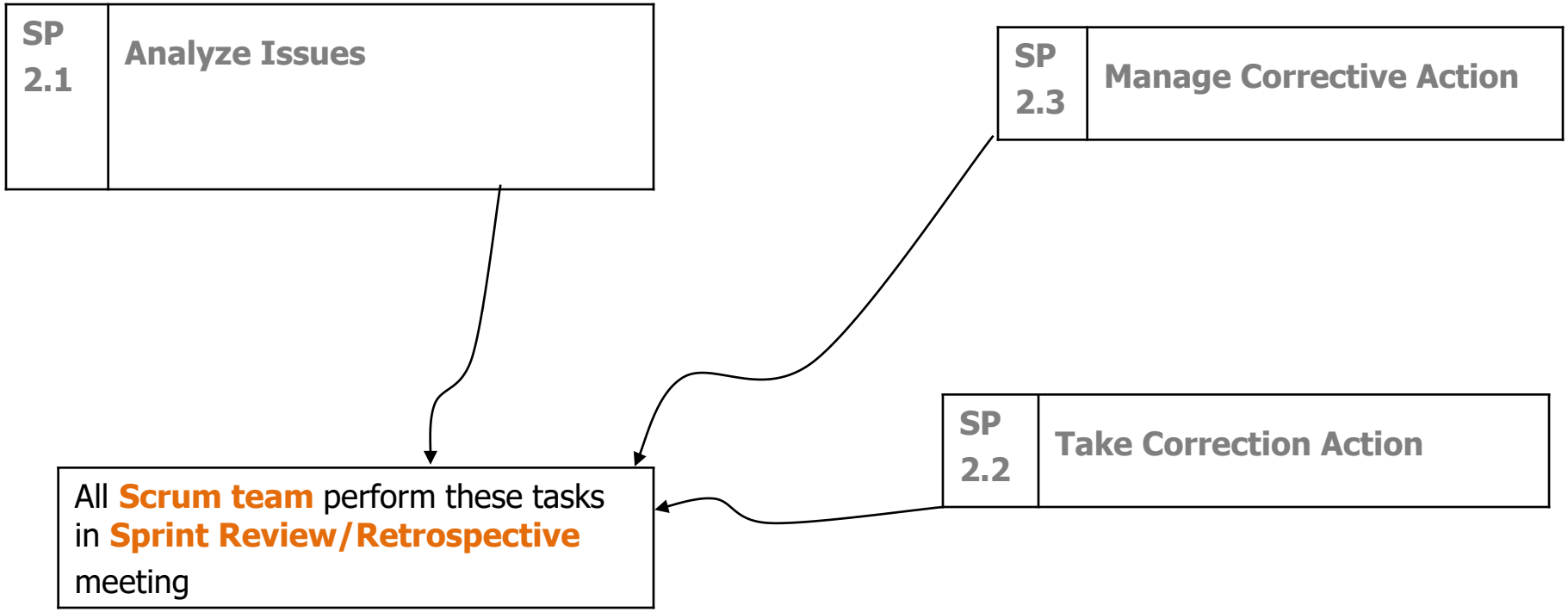
- Records of project performance
- Records of significant deviations
- Records of commitment reviews
- Records of project risk monitoring
- Records of data management
- Records of stakeholder involvement
- Documented project review results
- Documented milestone review results
- List of issue needing corrective actions
- Corrective action plan
- Corrective action results

How do we attain with *Scrum*?

SG1 in *Scrum*?


SP 1.1
Monitor Project Planning Parameters
SP 1.4
Monitor Data Management
SP 1.2
Monitor Commitments
SP 1.3
Monitor Project Risks
SP 1.5
Monitor Stakeholder involvement
SP 1.6
Conduct Progress reviews
SP 1.7
Conduct Milestone reviews
Product owner calculates indicators and show them in Sprint Review/Retrospective meeting.
Commitments of each sprint are recognized in Sprint Planning meeting. No more additional work during sprint and team update Sprint backlogs itself.
Team members define risks in daily meeting as well as sprint review too. However, risks analysis mind not completely done in the daily meeting.
Scrum Master responses for making the stakeholders understand to respect the rules and procedures that are defined in Scrum
Done during Daily meeting
Done during Sprint Review meeting

SG2 in *Scrum*?


SP 2.1
Analyze Issues
SP 2.3
Manage Corrective Action
SP 2.2
Take Correction Action
All Scrum team perform these tasks in Sprint Review/Retrospective meeting

example 1

Company Name – CySec (Darmstadt, Germany)

Project – Web Platform for CySec

Goal – A web application to help employees of CySec to send reports to their PI's, follow the events and use contact information and room booking system

Tool used – Open Project (www.openproject.org)

Sprint duration – 2 weeks

example 2

Company Name – EPAM (Minsk, Belarus)

Project – MS IJ

Customer – NewCorp (USA)

Goal – Developing and maintain software of mailing machines

Tool used – Customized Microsoft Sharepoint

Sprint duration – 2 weeks

example 3

Company Name – HOST (Kiev, Ukraine)

Project – Service Desk (http://servicedesk.org.ua)

Customer – HOST unIT (IT-Outsourcing)

Goal – Developing and maintaining a system of handling service requests as a single point of contact for users and ITSM

Tool used – MS Project

Sprint duration – 1 week

Reference

- http://catalyic.com/project-monitoring-control-cmmi-scrum-methodology-action/
- Interpreting the CMMI (R): A Process Improvement Approach, Second Edition By Margaret K. Kulpa, Kent A. Johnson link to the e-book
- http://www.software-quality-assurance.org/cmmi-project-monitoring-and-control.html
- Icons source: **http://www.iconarchive.com/**

Questions