Chapter 27
Requirements management practices

Objectives

- Addresses some principles and practices of requirements management.

- Student should enhance that effective management and communication among the project participants take an important role in having great requirements.

- Student should only understand basic concepts. The more detail of every process will be clarified in the next chapters.

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Requirements management process
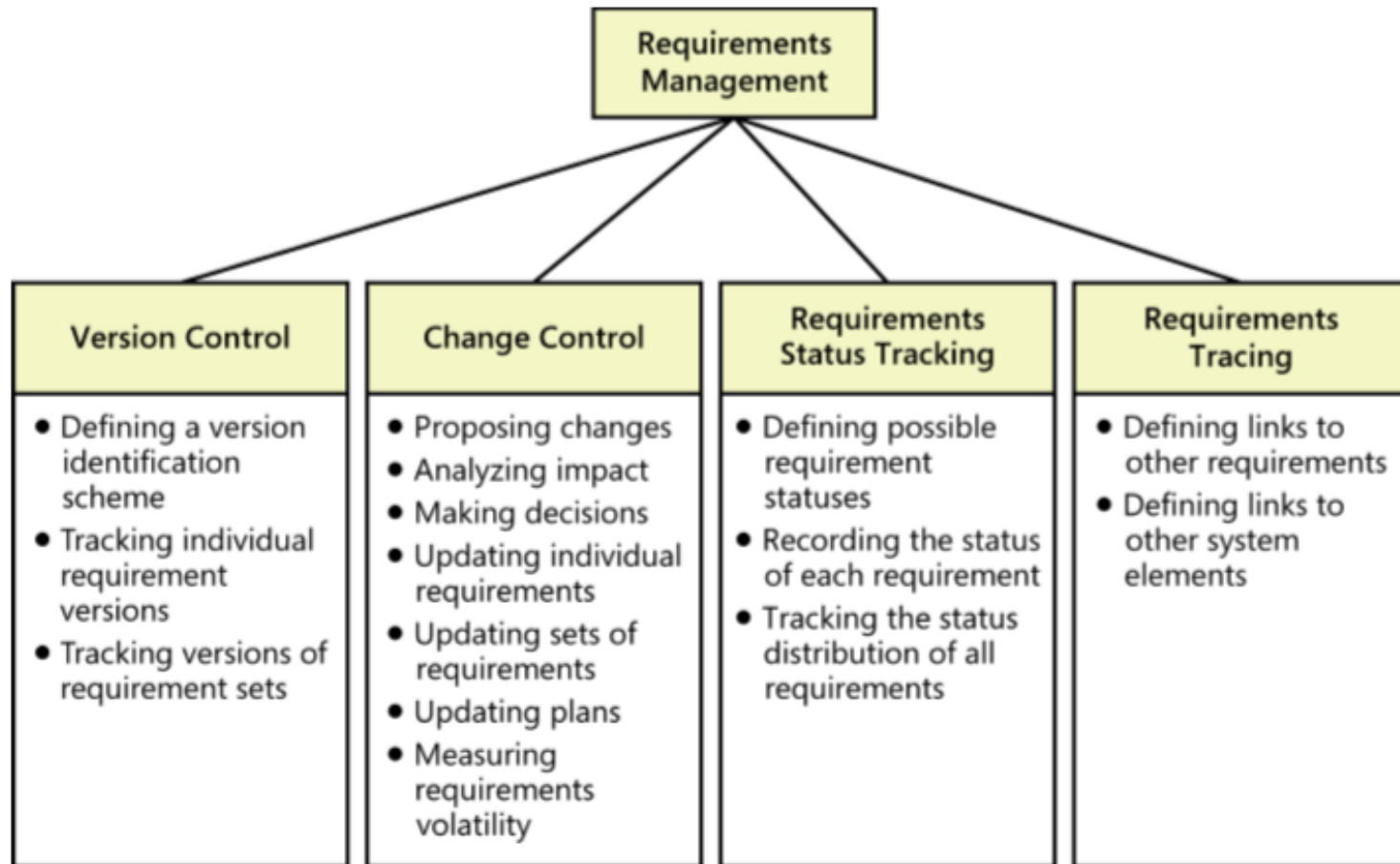
FIGURE 27-1 Major requirements management activities.

Requirement attributes

- Date the requirement was created
- Current version number of the requirement
- Author who wrote the requirement
- Priority
- Status
- Origin or source of the requirement
- Rationale behind the requirement
- Release number or iteration to which the requirement is allocated
- Stakeholder to contact with questions or to make decisions about proposed changes
- Validation method to be used or acceptance criteria

TABLE 27-1 Suggested requirement statuses

Status	Definition
Proposed	The requirement has been requested by an authorized source.
In Progress	A business analyst is actively working on crafting the requirement.
Drafted	The initial version of the requirement has been written.
Approved	The requirement has been analyzed, its impact on the project has been estimated, and it has been allocated to the baseline for a specific release. The key stakeholders have agreed to incorporate the requirement, and the software development group has committed to implement it.
Implemented	The code that implements the requirement has been designed, written, and unit tested. The requirement has been traced to the pertinent design and code elements. The software that implemented the requirement is now ready for testing, review, or other verification.
Verified	The requirement has satisfied its acceptance criteria, meaning that the correct functioning of the implemented requirement has been confirmed. The requirement has been traced to pertinent tests. It is now considered complete.
Deferred	An approved requirement is now planned for implementation in a later release.
Deleted	An approved requirement has been removed from the baseline. Include an explanation of why and by whom the decision was made to delete it.
Rejected	The requirement was proposed but was never approved and is not planned for implementation in any upcoming release. Include an explanation of why and by whom the decision was made to reject it.

- **Benefits:**
  - Issues from multiple requirements reviews are collected so that no issue ever gets lost.
  - The project manager can easily see the current status of all issues.
  - A single owner can be assigned to each issue.
  - The history of discussion around an issue can be retained.
  - The team can begin development earlier with a known set of open issues rather than having to wait until the SRS is complete.

Common types of requirements issues

TABLE 27-2 Common types of requirements issues

Issue type	Description
Requirement question	Something isn't understood or decided about a requirement.
Missing requirement	Developers uncovered a missed requirement during design or implementation.
Incorrect requirement	A requirement was wrong. It should be corrected or removed.
Implementation question	As developers implement requirements, they have questions about how something should work or about design alternatives.
Duplicate requirement	Two or more equivalent requirements are discovered. Delete all but one of them.
Unneeded requirement	A requirement simply isn't needed anymore.

Measuring requirements effort

- Planning requirements-related activities for the project
- Holding workshops and interviews, analyzing documents, and performing other elicitation activities
- Writing requirements specifications, creating analysis models, and prioritizing requirements
- Creating and evaluating prototypes intended to assist with requirements development
- Reviewing requirements and performing other validation activities
- Count the effort devoted to the following activities as requirements management effort

Managing requirements on agile projects

- Agile projects accommodate change by building the product through a series of development iterations and managing a dynamic product backlog of work remaining to be done