

## 5. Analyzing Technical Options

### Validating Requirements *Supplemental Reading*

Once you've identified required and optional functional system requirements, you will want to validate them through one or more processes. Depending on your situation, you may use one, two or all three of the methods described below. In any case, you should involve all your stakeholders, particularly users, and stop once you have achieved consensus.

#### Checklist for validation

Are the requirements:

- ✓ Accurate
- ✓ Consistent
- ✓ Feasible
- ✓ Able to be validated
- ✓ Clear and simple to understand
- ✓ Numbered for reference
- ✓ Only one requirement per statement—don't try to lump them together

#### Desk checking

Desk checking means asking individual stakeholders to conduct a written review of your requirements.

- Read document through without documenting defects.
- Determine whether any major aspects are missing and document those.
- Determine whether the document structure is clear and then document it.
- Read checklist through to remember particular points to consider.
- Reread document with checklist in mind.
- Record defects and queries noticed.
- Send list to business analyst and keep a copy.

#### Walkthrough

Walkthroughs are facilitated group reviews of the requirements.

- Gather a group (usually 10 or fewer) to discuss the requirements and find defects.
- Ask the business analyst to be an observer and resource.
- Assign a neutral facilitator.
- “Walk through” the document page by page, looking for and recording defects.
- Use the checklist above and jot your thoughts.
- The facilitator or analyst should make a list of defects and queries for document revision.

## 5. Analyzing Technical Options

### Validating Requirements *Supplemental Reading*

#### Peer review

The peer review is similar to a walkthrough. It is highly structured, following a set of rules. Peer review is useful for validation in high-risk projects, and has a goal of finding as many defects as possible.

#### Rules

- Peer group consists of four to five peers (e.g., users in one group and management in another).
- Each member prepares for the meeting by performing an individual review using a checklist.
- Each member must bring a list of defects found to the meeting.
- Each member must track preparation time.
- Each member has a specific facilitator role during the meeting:
  - Author: makes sure people understand the intent of a requirement, makes revisions after the meeting
  - Moderator (Facilitator): sends out agenda and pre-meeting instructions, facilitates meeting, and makes sure revisions are made
  - Reader: reads each requirement in turn to introduce it
  - Recorder: takes notes on all problems identified; should indicate seriousness
  - Timer: Provides time checks at  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  and end times
- Reviews last no more than two hours (including break).
- The goal is to find problems and only problems (not solutions).

#### Procedure

##### Before meeting:

- Facilitator: Identify participants and send out requirements and supporting materials for review. Based on time demands on participants, schedule meeting.
- During the meeting:
  - Facilitator: Ask the group for large-scale items missing from document.
  - Facilitator: Ask the group for large-scale comments on the document.
  - Reader: Read or paraphrase each requirement (or set of requirements), with comments following each.
  - Facilitator: Limit any discussion about solutions; keep focus on identifying problems.
  - Recorder: Track problems noted for each requirement.