

## Collect Requirements Tools and Techniques

The following tools and techniques are important to recognize and understand since you may be asked about them on the exam. Be able to recognize them and choose their definitions. One or more of these tools and techniques may be used in collecting requirements. It's best to understand your audience to see which of these works best.

- Data Gathering
  - Brainstorming: A technique to get an exhaustive list of requirements.
  - <sup>1</sup>Interviews: A formal or informal approach to elicit information from stakeholders by talking to them directly.
  - <sup>1</sup>Focus groups: An elicitation technique that brings together prequalified stakeholders and subject matter experts to learn about their expectations and attitudes about a proposed product, service, or result.
  - <sup>1</sup>Questionnaires and surveys: A written set of questions designed to quickly collect information from a large number of respondents.
  - <sup>1</sup>Benchmarking: The comparison of actual or planned practices, such as processes and practices, to those of comparable organizations to identify best practices, generate ideas for improvement, and provide a basis for measuring performance.

- Data Analysis
  - <sup>1</sup>Document analysis: An elicitation technique that analyzes existing documentation and identifies information relevant to the requirements.
- Decision Making
  - <sup>1</sup>Voting: A method used to make decisions based on unanimity, majority, and plurality.
  - Autocratic decision making
  - <sup>1</sup>Multicriteria decision analysis: A systematic approach for setting criteria like requirements and resources.
- Data Representation
  - <sup>1</sup>Affinity diagrams: A technique that allows large numbers of ideas to be classified into groups for review and analysis.
  - <sup>1</sup>Mind-mapping: A technique used to consolidate ideas created through individual brainstorming sessions into a single map to reflect commonality and differences in understanding and to generate new ideas.

- Interpersonal and Team Skills
  - <sup>1</sup>Nominal group technique: A technique that enhances brainstorming with a voting process used to rank the most useful ideas for further brainstorming or for prioritization.
  - Facilitation workshops: A technique that gets people together to discuss the project so everyone has an understanding of the project objectives.
  - Observation/conversation: Talking with team members to gather information to update stakeholders. Plus, observing team interactions allows the project manager to address team issues.
- <sup>1</sup>Context diagrams: A visual depiction of the product scope showing a business system (process, equipment, computer system, etc.), and how people and other systems (actors) interact with it.
- <sup>1</sup>Prototypes: A method of obtaining early feedback on requirements by providing a working model of the expected product before actually building it.

<sup>1</sup>These definitions are taken from the Glossary of Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide)* – Sixth Edition, Project Management Institute Inc., 2017.