# 101+ Questions you can ask to Elicit Requirements and Uncover Expectations

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# **Industry Article**

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# 101+ Questions you can ask to Elicit Requirements and Uncover Expectations

When eliciting requirements and uncovering expectations for a project, much of the challenge stems from learning what the business needs from the new product being built (the product is the end result of the project, such as system, new equipment, new or changed process, new service, etc.). Often times, we may not even know the right questions to ask to get started, much less get into enough depth to discover all the important needs of stakeholders. This handy guide is a summary to help you get started with your questions and to help ensure you've asked the important ones on a project.

### **General Requirements and Expectations Questions**

- 1. Ask for pairs, such as:
  - Why/why not/why now
  - What/what not/what now
  - Who/who not/who now
- Paired extremes, such as:
  - Best/worst
  - Longest/shortest
  - Easiest/hardest
- 3. Volumetrics, such as:
  - How many
  - How often
  - When
- 4. Avoid:
  - Can/could/should
  - Leading questions, such as
    - "Have you ever thought about a ..."
    - "Isn't it better to ..."
    - "Don't you think that..."

Note: The interviewer will obtain better results if the interviewee feels safe.

## Philosophy Towards Requirements

- 1. How will you determine that the requirement has been achieved? What were the acceptance criteria? How would you test?
- 2. Ask about use of the product (system):
- 3. Why and how is the product used?
- 4. What does it do for you/other systems/other business lines with which it interfaces?
- 5. How do you use the product in relation to the business steps/processes that you perform?
- 6. Under what conditions might the product not perform as planned (exception processing)?
- 7. Currently, under what conditions does the product not perform according to your expectations: time of day/week/month/year? Functions that you perform? Data you try to access? Amount of data you are transferring?
- 8. Dependencies. Can you give instances when a function or part of a function must be completed before another starts?



- 9. What are the physical environments in which the system is going to be used by the customers, such as dark/dirty/dusty/hot/cold/hazardous (chemical or radioactive)?
- 10. What are the physical limitations of the product, if any (such as space/height/weight/cable runs/capacities)?
- 11. What are the deployment requirements, such as pilot/parallel/switchover/iterative releases?
- 12. What are the safety requirements of the product?
- 13. What are the 7 x 24 availability requirements? When will the customers not use the product?
- 14. In what ways, if any, does the system have to be accessed by special needs people (age/mental capabilities/different cultures)?
- 15. What regulatory or legal agencies or bodies have an interest or set of requirements/rules related to this system?
- 16. What are the system interfaces?
- 17. What would be considered less than reliable availability of the system or product?
  - a. Percentage (ex. 99%)
  - b. Transactions or query loads
  - c. Planned maintenance
  - d. Mean time between failures (MTBF) or mean time to repair (MTTR)
- 18. Who will use the product and when (ex. internal/external/PC-literate/routinely or occasionally)?

#### **Closing Questions**

- 1. Is there anything else I should know about...?
- 2. What else should I know to make this project a success?

#### Other Fundamental Questions

**The W's: why, what, who, when, where.** These questions are the fundamentals of requirements analysis. They help the analyst determine root causes, what the requirements are, who the stakeholders are, when processes occur, and where information comes from/goes to.

#### Who

- Who can provide me/us with information?
- Who else can provide me/us with information?
- Who else might be affected by this project or product?
- Who has authority to make decisions?

#### What

- What is causing the problem(s)?
- What would your ideal solution(s) look like?
- What are the benefits of this project?
- What is the priority of this requirement?
- What concerns do you have about...?
- What are you most pressing issues?
- What concerns do you have about the change or new product?
- If the system is not installed properly, what will your major concerns and pressing issues be?



#### Why

- Why was this new product or change requested?
- Why is this new system or change required?
- Why is this level of service required (response time, when reports are due, etc.)?
- Why is the system the way it is (whatever you observe or are told about)?

#### When

- When do you need this by?
- When is this system brought up in the morning and down at night?
- When do processes occur?

#### Other

- How much can we spend?
- How many resources are available? Who are they? When will they be available?
- Can the information you are giving me be shared with others?
- Are your answers official (or off the record)?
- How often is the system available/unavailable?

#### **Data View Questions**

#### Entities or classes

- 1. What are the categories of data (entities/classes), such as Customer?
- 2. What are the different types?

#### Entity (Data) relationship rules

- 1. Can one entity exist or be set up without a related entity (optionality rule)? For example can a customer be set up without an account?
- 2. What are the minimums and maximums for the above (how many customers can own an account/how many accounts can each customer own)
- 3. If I {create, read, update, or delete} one entity, will there be an effect on another entity (referential integrity rule)?

#### Attribute and attribute rules

- 1. What are the facts (attributes) about each entity?
- 2. What, if any, are the domains (ranges/permitted values) of each attribute?
- 3. Is there intelligence built into the attribute and what are the consequences or impacts of removing it?
- 4. Is the attribute required or optional?
- 5. What flags or defaults are required?

#### Security and retention

- 1. How long does this data need to be retained?
- 2. Do you want it inactivated before deleted?
- Who can read it?
- 4. Who can access it?



#### For data entry:

- 1. How/how often do you enter this information?
- 2. Who enters this information?
- 3. Who currently provides it?
- 4. Who needs this information?
- 5. Who gets this information?
- 6. Why do you need these inputs?
- 7. What information do you need in that report or on that on-line screen or window?
- 8. What information are you going to send (and to whom)?
- 9. What response time is required?
- 10. What is the current response time?

#### For reports:

- 1. How/how often do you analyze information?
- 2. Why does (business area) need this information?
- 3. How/how often do you summarize it?
- 4. How often do you produce this report?
- 5. How/how often do you report on it?
- 6. How often do you really need this information?
- 7. If you could, how often would you send it?
- 8. How often would you view it?
- 9. How often would you act on it?
- 10. How often would those you send it to do anything with it?
- 11. What information are you going to produce and for whom?
- 12. What information are you going to receive and by whom?
- 13. Who analyzes this information?
- 14. Who makes decisions with this information?
- 15. Why is information reported this way?
- 16. When are these reports generated?
- 17. When do you need to produce this report?
- 18. What information is contained in that report/user interface?
- 19. What information do you send (and to whom)?
- 20. What information do you receive (and from whom)?
- 21. What information do you produce (and for whom)?



#### **Process View Questions**

- 1. How do you get from point A (input) to point B (output)...?
  - What are the current process steps (as-is)?
  - What will the new process steps be (to-be)?
- 2. Ways or media (such as online, by phone, in-person) to:
  - Process
  - Receive
  - Distribute
- 3. Who's (what role or function) involved in the processing of ...
- 4. Trigger questions
  - How often (do/receive/distribute)
  - When (do/receive/distribute)
- 5. How is something:
  - Created
  - Read or accessed
  - Updated or changed
  - Deleted or archived or purged

#### Interaction View Questions

- 1. What triggers the interaction?
- 2. What do we expected the "system" to do in response?
- 3. What notification comes back?
- 4. What do we expect the system to do?
- 5. What is the most common way to get to the end result?
- 6. What are some different ways to get to the end result?
- 7. What prevents you from getting to the end result?

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