PIM Training Program

Getting started with Problem/Opportunity

Requirements Gathering

This session is the Second of the **Getting started with a problem/opportunity** program.

PIM Program Introduction

Session Details

1. Analyzing a problem
2. Requirements gathering ⬅
3. SMART problem statements
4. Project customer impact
5. Practice problem statements

Session Facilitator: Karthic Raja (L5 Product Manager)

Session Duration: 4 hours

Note that at the end of this program, you will be evaluated on your ability to write clear business problem statements.

Objectives of Training

You will often be asked to analyze problems that are often vague and ambiguous leading to unclear requirements. This module covers a systematic approach towards gathering requirements. At the end of this module, you should be able to:

- Describe the requirements gathering process
- Prepare for requirements gathering
- Understand the parts of a requirements document
- Learn requirements gathering techniques
- Ways to address gaps in requirements gathering
- Methods to create requirements document

What is the Need for Requirements Gathering?

In order to start any project, it is required to create clear, concise and agreed set of customer/stakeholder requirements. This enables setting expectations and focusing on delivering what the customer/stakeholder wants.

How the customer explained it

How the project leader understood it

How the engineer designed it

What operations installed

How the programmer wrote it

How the sales executive described it

How the project was documented

What the customer really needed

Preparation for Requirements Gathering

Steps in Requirements Gathering

The 5 key steps in requirements gathering:

- Establish project goals and objectives early

- Document every activity to be performed in requirements gathering

- Perform quick brainstorm to identify the right stakeholders (sponsors, customers and users)

- Focus on business requirements and not tools

- Remember that you didn't get everything

Establish Project Goals

Establish project goals and objectives early

Goal: High level statements that provide overall context for what the project is trying to achieve, and should align to business goals.
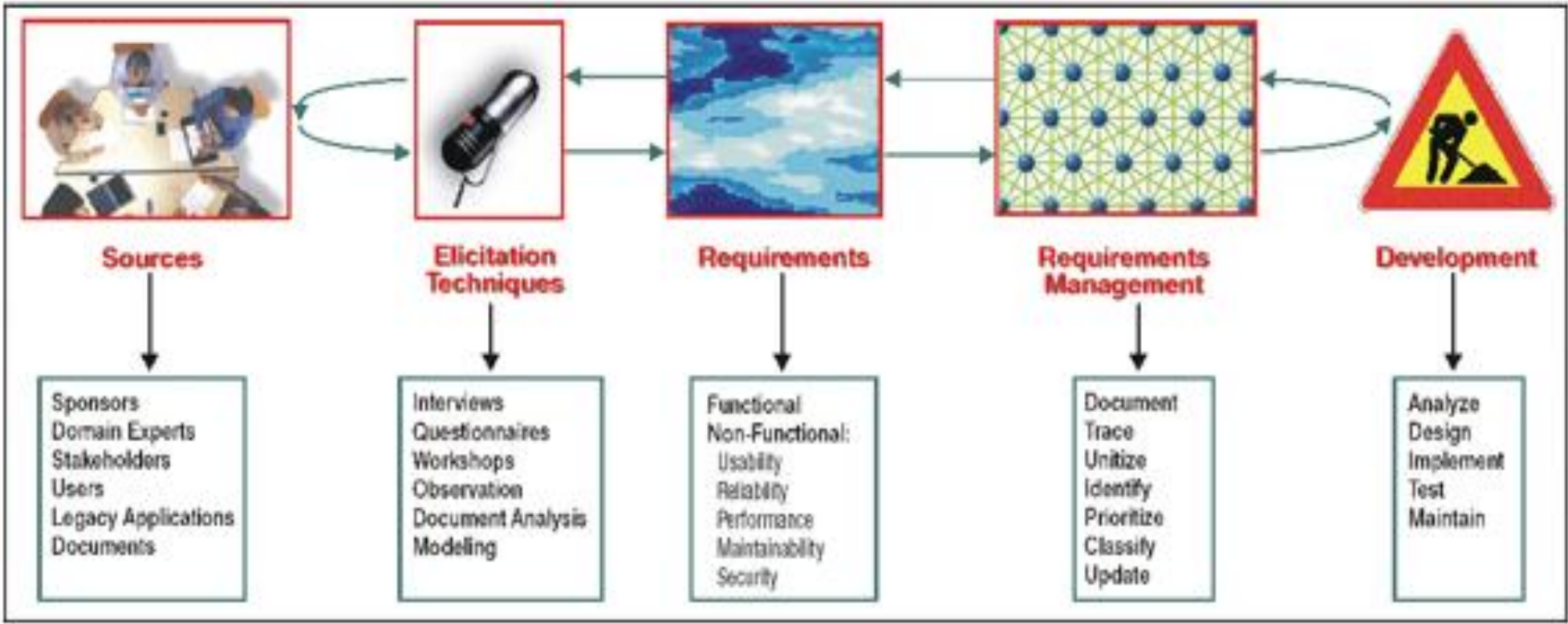
Objective: Lower level statements that describe the specific, tangible deliverables that the project will deliver.

Document Every Activity

**Document every activity to be performed in requirements gathering**

Identify the list of activities to be performed and document them to be used during requirements gathering.

Sources	Elicitation Techniques	Requirements	Requirements Management	Development
Sponsors	Interviews	Functional	Document	Analyze
Domain Experts	Questionnaires	Non-Functional:	Trace	Design
Stakeholders	Workshops	Usability	Unitize	Implement
Users	Observation	Reliability	Identify	Test
Legacy Applications	Document Analysis	Performance	Prioritize	Maintain
Documents	Modeling	Maintainability	Classify	
		Security	Update	

Brainstorming

Perform quick Brainstorm to identify right Customers, Stakeholders and Users

- A project can have 'hidden' stakeholders
- Identify the real users
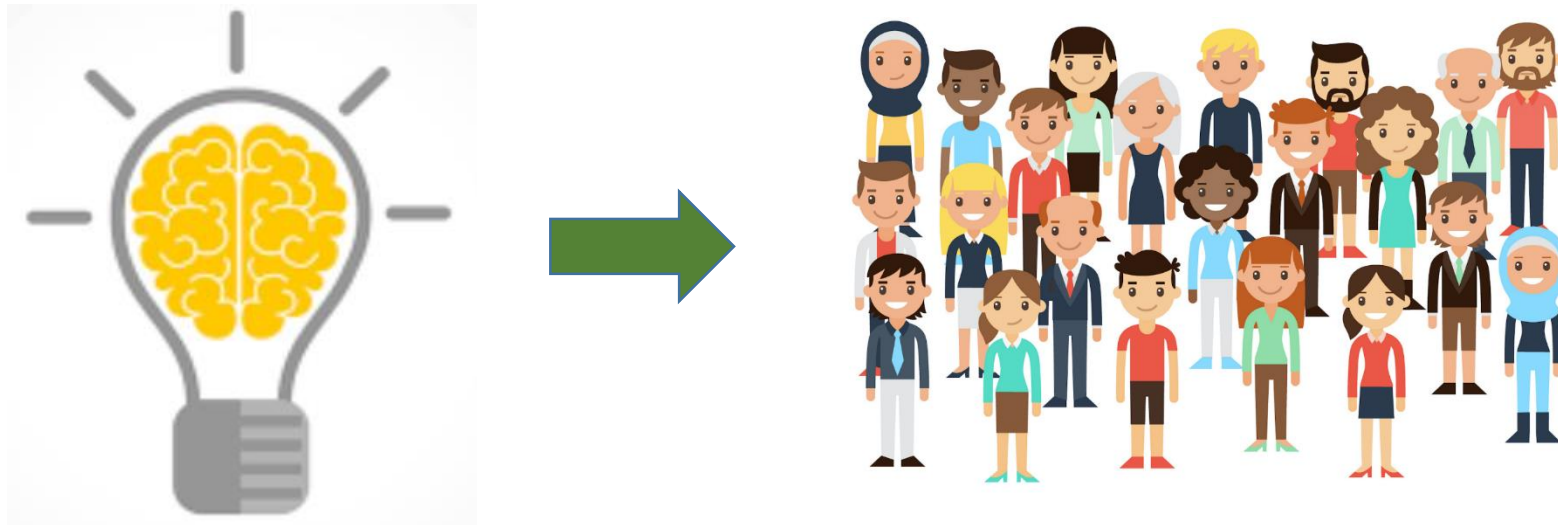
Stakeholder: Includes everyone involved in a project. Customer, team, PIM, STLs, tech team support resource and everyone involved will be stakeholder

Customer: Someone who is benefitting from the problem resolution or opportunity. Customer could be user or someone trying to get a solution that will make it better for the customer/user

User: Person who hands-on uses the product or solution

Sponsor: The STL or Leader or Manager who is sponsoring the project

Focus on Business

Focus on business requirements and not tools

- Focus and listen to stakeholder (Customers, Sponsors, and User) needs
- Not your tool of your choice to do best
- Focus on WHAT and not HOW

Accept Ambiguity

Remember that you didn't get everything

- Things will change
- Priorities will shift
- Requirements are human driven and simply not static

Parts of a Requirements Document

Parts of a Requirements Document

What is a Business Requirements Document (BRD)?
It emphasizes on the needs and expectations of the customer. BRD indicates what the business wants to achieve, and indicates all the project deliverable and the associated inputs and outputs.

- **Executive Summary:** Outline of the requirements of the project.
- **Project Objectives in SMART format:** Objectives should be Specific, Measurable, Attainable, Realistic, and Time bound.
- **Need Statement:** Outlines why the project is needed and how the project will be able to meet the needs.
- **Project Scope:** Outlines what to be included and what should not be included.
- **Financial Statements:** Indicates the impact of the project and revenue over specific period of time.
- **Functional Statements:** Functional requirements and corresponding features including diagrams, charts, and timelines.
- **Schedule/Timelines/Deadlines:** Phases of the project will be covered and Stakeholders will be aware of what is required and when it will be required.
- **Cost & Benefit:** Holds the cost of the project along with the cost-benefit analysis. The savings from the project are also captured.

Requirements Gathering Techniques

Requirements Gathering Techniques

Best practical ways to gather requirements:

- Interviews
- Focus Groups
- Idea/Mind maps
- Affinity Diagrams
- Brainstorming
- Benchmarking
- Document/Wiki analysis
- Questionnaire
- Observation
- Prototype

Idea/Mind Maps

A graphical way to represent ideas and concepts. It helps structuring information, helping you to analyze, comprehend, synthesize, recall and generate new ideas.
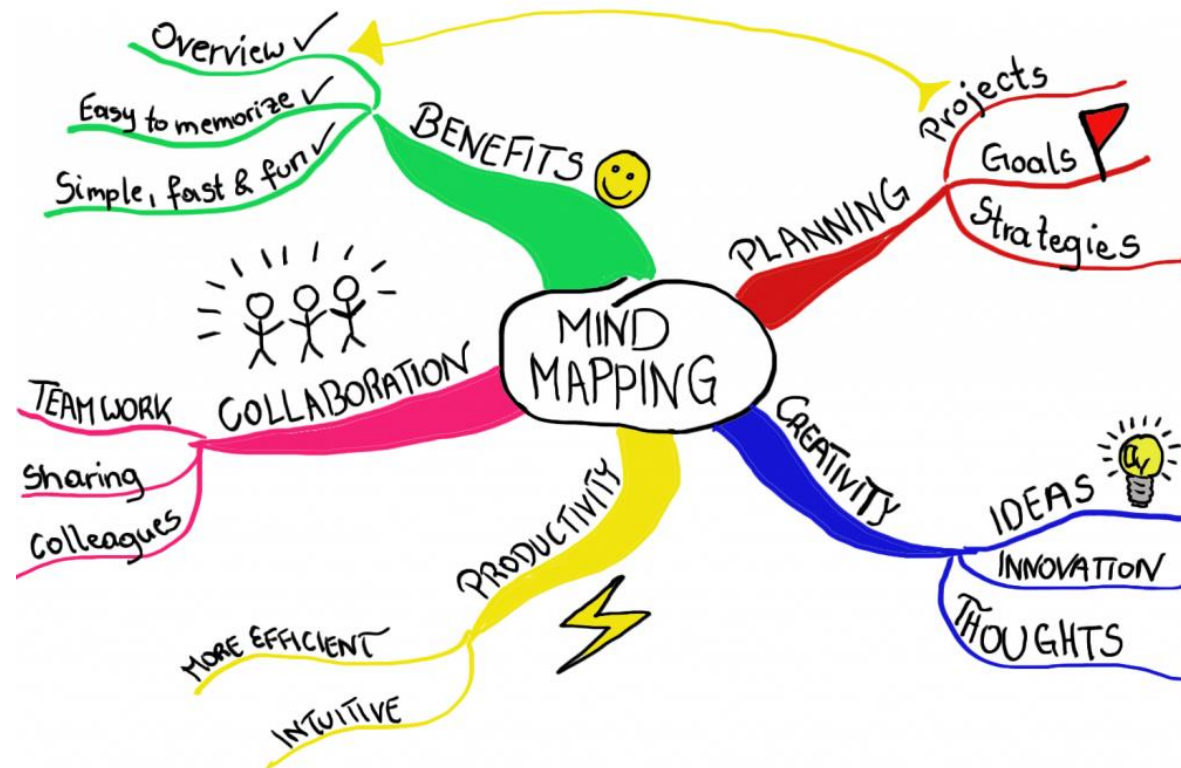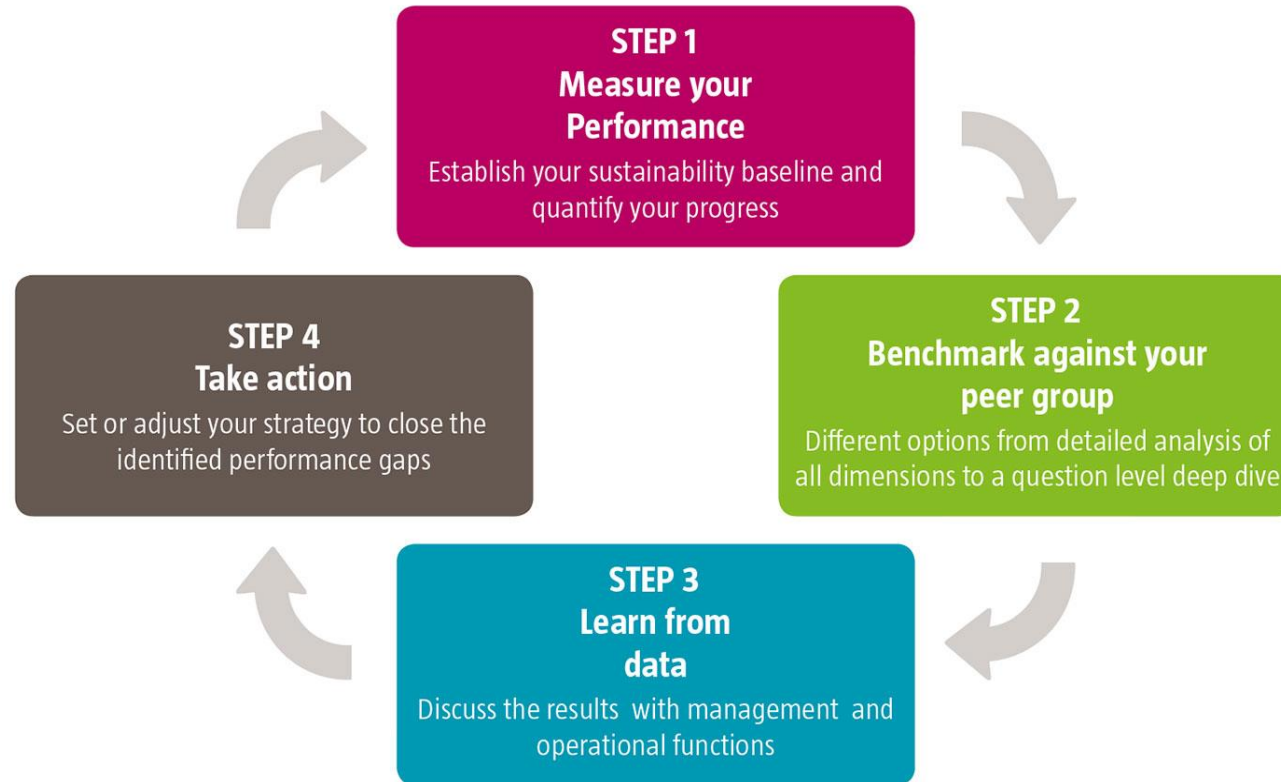
Affinity Diagrams

A tool that gathers large amounts of language data (ideas, opinions, issues) and organizes them into groupings based on their natural relationships.
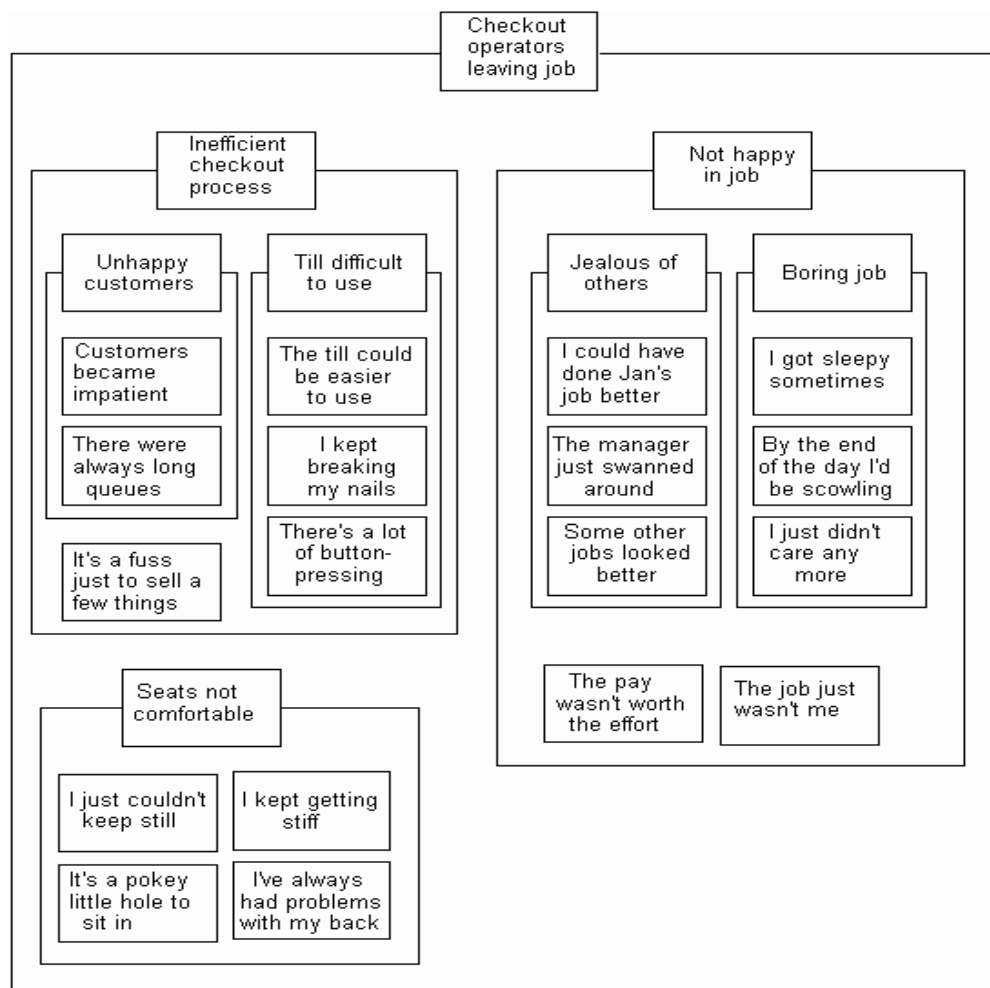
Benchmarking

Benchmarking is the practice of comparing business processes and performance metrics to industry bests and best practices from other companies.

STEP 1
Measure your Performance
Establish your sustainability baseline and quantify your progress

STEP 2
Benchmark against your peer group
Different options from detailed analysis of all dimensions to a question level deep dive

STEP 3
Learn from data
Discuss the results with management and operational functions

STEP 4
Take action
Set or adjust your strategy to close the identified performance gaps

Prototype

A replica of the final product to be developed, which will contain the desired features.
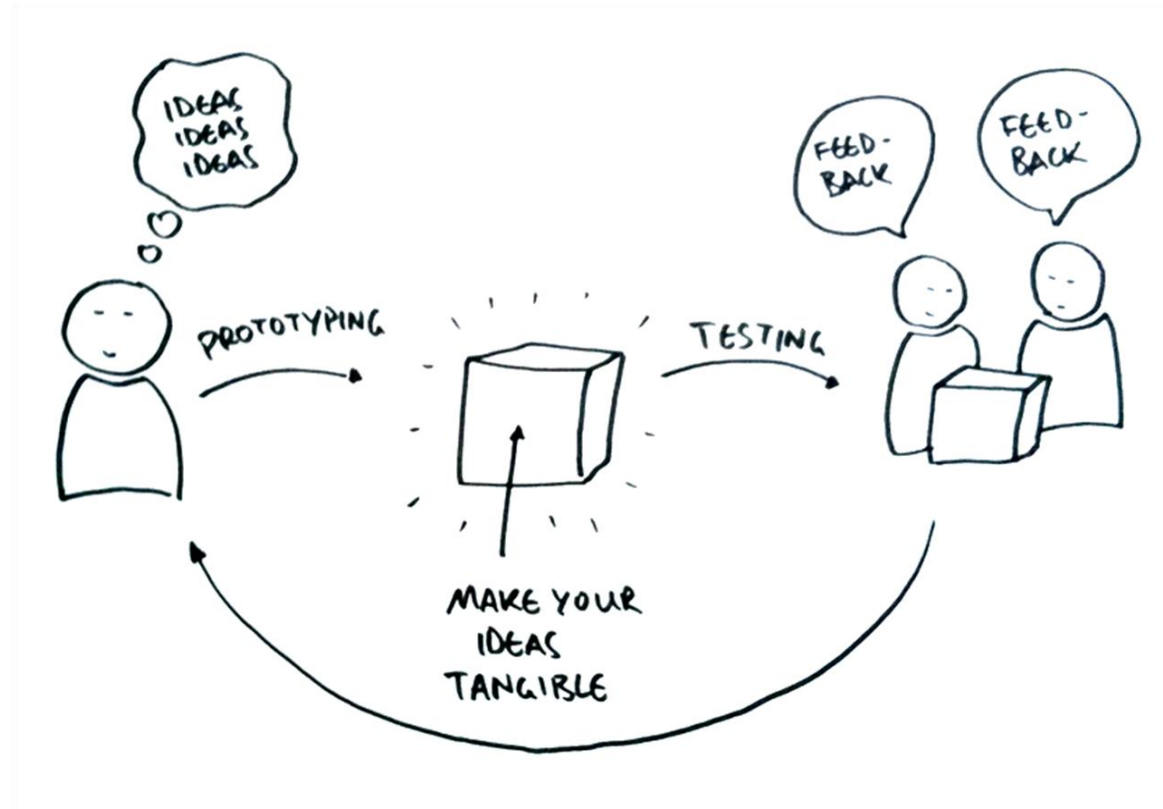
Effective Questions
for
Requirements Gathering

Effective Questions for Requirements Gathering

Kipling Method [5W 1H]:

5W 1H is the shorthand of 'Who, What, When, Where, Why, and How'. This is used in both problem solving and requirements gathering.

Work on each topic or concept of the problem at a time. Write down what you know, and then frame questions using these 5W 1H.

Where:
  - Where are the symptoms of the problem observed?
  - Where does the business start?
  - Where would the results be visible?
  - Where would the users or stakeholders located?

Effective Questions for Requirements Gathering – Cont'd

Who:
- Who will deliver the inputs for the problem?
- Who will get impacted by the problem?
- Who can I ask to learn more about this?
- Who will use the feature when developed?

What:
- What do I know about this business problem?
- What does this problem needs to solve?
- What needs to be tracked?
- What is the end results of doing this?
- What assumptions am I making about this problem that I need to confirm?

When:
- When the problem is expected to be solved?
- When will we be ready to start solution to this problem?
- When do you need to know about causes of the problem?

Effective Questions for Requirements Gathering – Cont'd

Why:
- Why is this problem important to be solved?
- Why was this problem not addressed before?
- Why all the necessary problem analysis could not be performed?

How:
- How will this fix or development solve business problem?
- How might we meet this business need?
- How will we know this problem is complete?
- How might we think about this feature a bit differently?

Addressing Gaps in Requirements

Addressing Gaps in Requirements

Need to work with key stakeholders and sponsors on addressing gaps in requirements. During such meetings it is required to keep the conversation aligned to the below points.

Define Success Metric: Ask stakeholders to define the success metric clearly

Mind Change: Stakeholders mindset is prone to change

Problem and Objective: Always focus on the problem and objective of the project

Stakeholder Priority: Take time to address conflicting stakeholder priority

Divert Stakeholder focus: Divert stakeholder focus on one particular focused solution to the problem

Creating Requirements Document

Creating Requirements Document

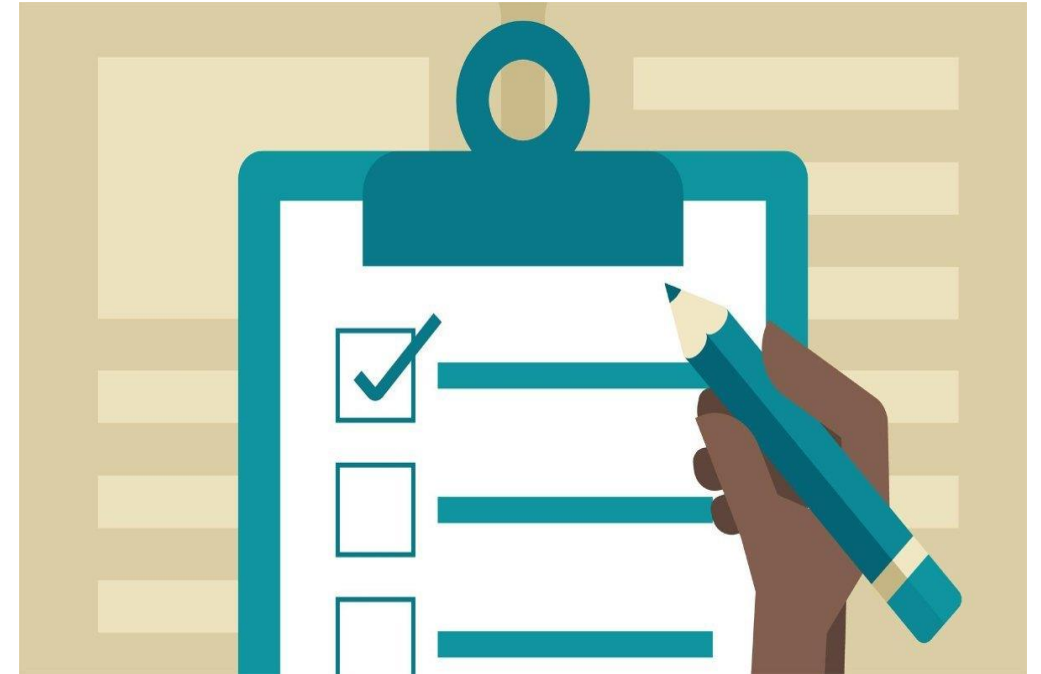**What are the steps in creating requirements document?**

The 5 steps given below helps to create a requirements document.

| Develop Requirements | → | Write and document requirements | → | Check Completeness | → | Analyze, Refine, and Decompose requirements | → | Validate and Manage requirements |

Key Learnings

What did you learn?

➢ Preparation for Requirements Gathering
  5 key steps in requirements gathering
  - Establish projects goals and objectives early
  - Document every activity to be performed
  - Identify right stakeholders & users
  - Focus on business requirements and not tools
  - Remember that you didn't get everything

➢ Parts of a Requirements Document
  - What is Business Requirements Document (BRD)?
  - 8 parts of a BRD

➢ 10 techniques in Requirements Gathering

➢ Effective questions for Requirements Gathering
  - Overview of Kipling Method [5W 1H]
  - List of questions under Where, What, Who, When, Why, How

➢ 5 ways of addressing gaps in requirements gathering

➢ 5 step approach in creating requirements document

Thank You