

Software Requirement Life Cycle

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What is Requirement ?

- A Software Requirement – is a complete description of the behavior of a system to be developed (Ref: WIKI)
- It addresses:
 - Why are we building the system?
 - Various levels and types of requirements that need to be defined
 - What benefits are we expecting to get from it?
 - Well defined software requirements
 - What do we actually need it to do?
 - Getting Stakeholders involved in the process
 - Requirements activities throughout the software development life cycle

Why Gather Requirements ?

- To group your thoughts and ideas in a logical way
- To group someone else's thoughts and ideas in a logical way
- To understand what a software package must do before making a selection
- To decide whether to buy or build a solution
- To provide a basis for testing

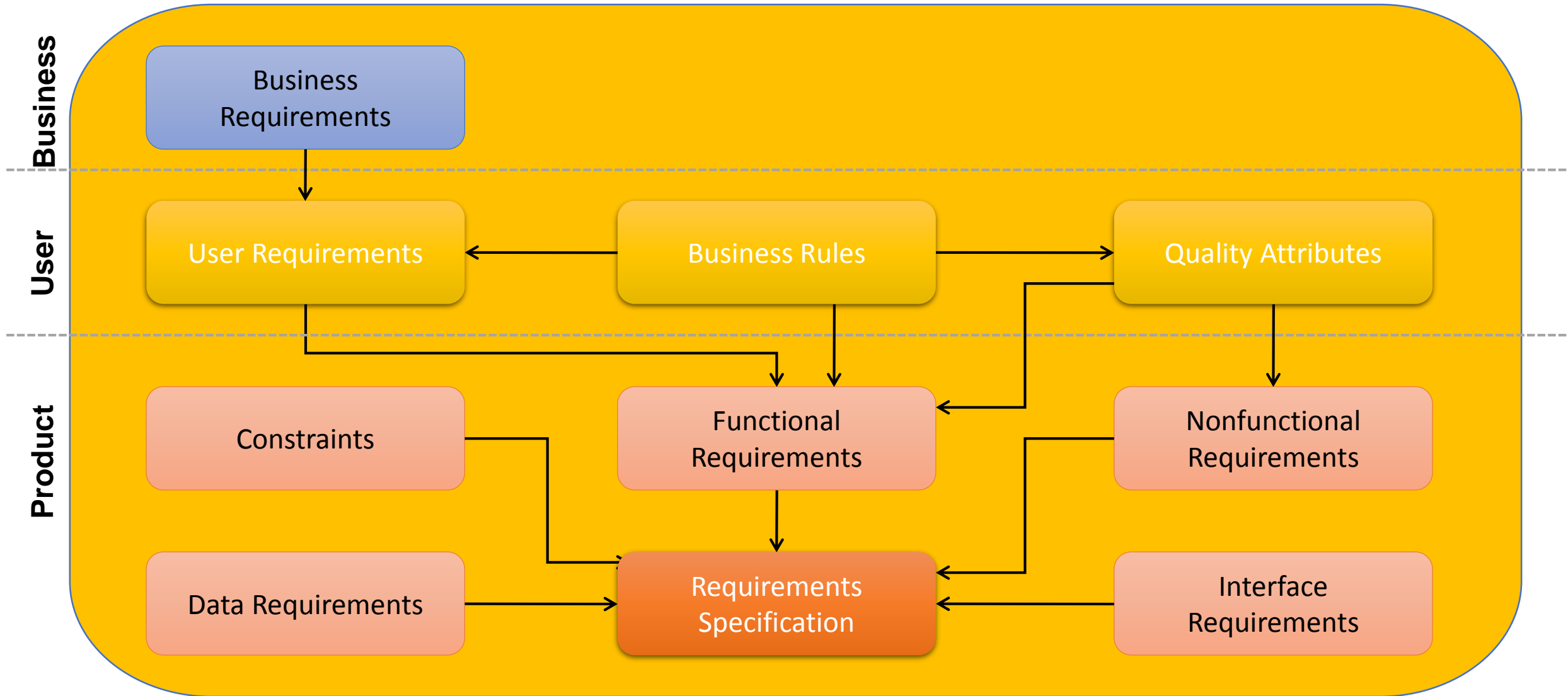
Why Requirement Life Cycle ?

- Bridges between the developers & the user or beneficiaries
- Describes the subcomponent of the process
- Details the constraints, overcome, risks & change process
- Captures the users' requirements
- Highlights inconsistencies and conflicts
- Defines system and acceptance testing activities
- Eliminates legacy activities
- Well Defined & Managed requirements reduces project overruns

Why Requirement Engineering

- Primary measure of success of a software system
- Process of
 - Identifying Stakeholders
 - Their Needs
 - Documenting & Analysis
 - Communication & Subsequent Implementation.
- The core activities include:
 - Eliciting
 - Modeling and Analyzing
 - Communicating
 - Agreeing
 - Evolving

Requirement Levels



Requirement Life Cycle



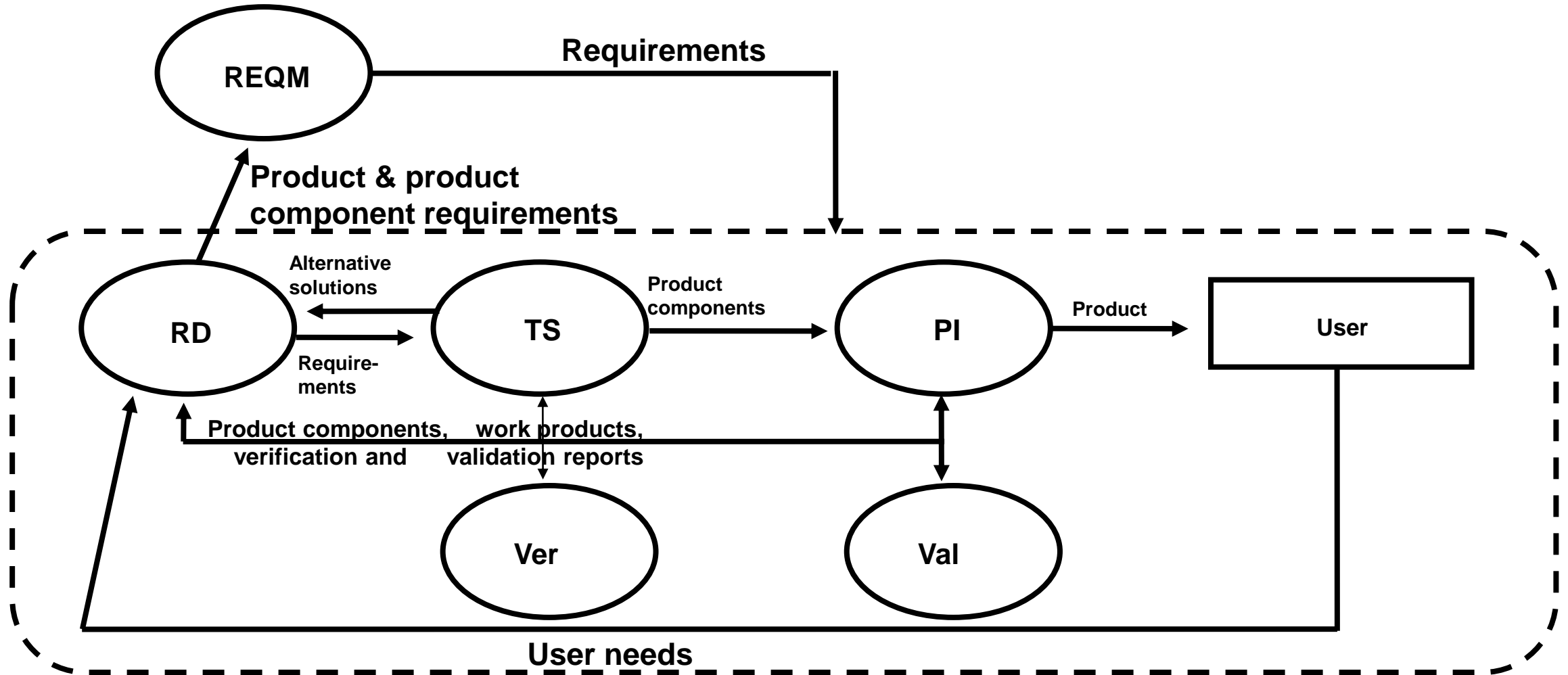
The diagram illustrates the Requirement Life Cycle. It consists of a light orange rectangular container. Inside this container, at the top, is a wide orange rounded rectangle labeled 'Requirement Engineering'. Below this, the space is divided into two rounded rectangles: a dark olive green one on the left labeled 'Requirement Development' and a dark green one on the right labeled 'Requirement Management'.

Requirement Engineering

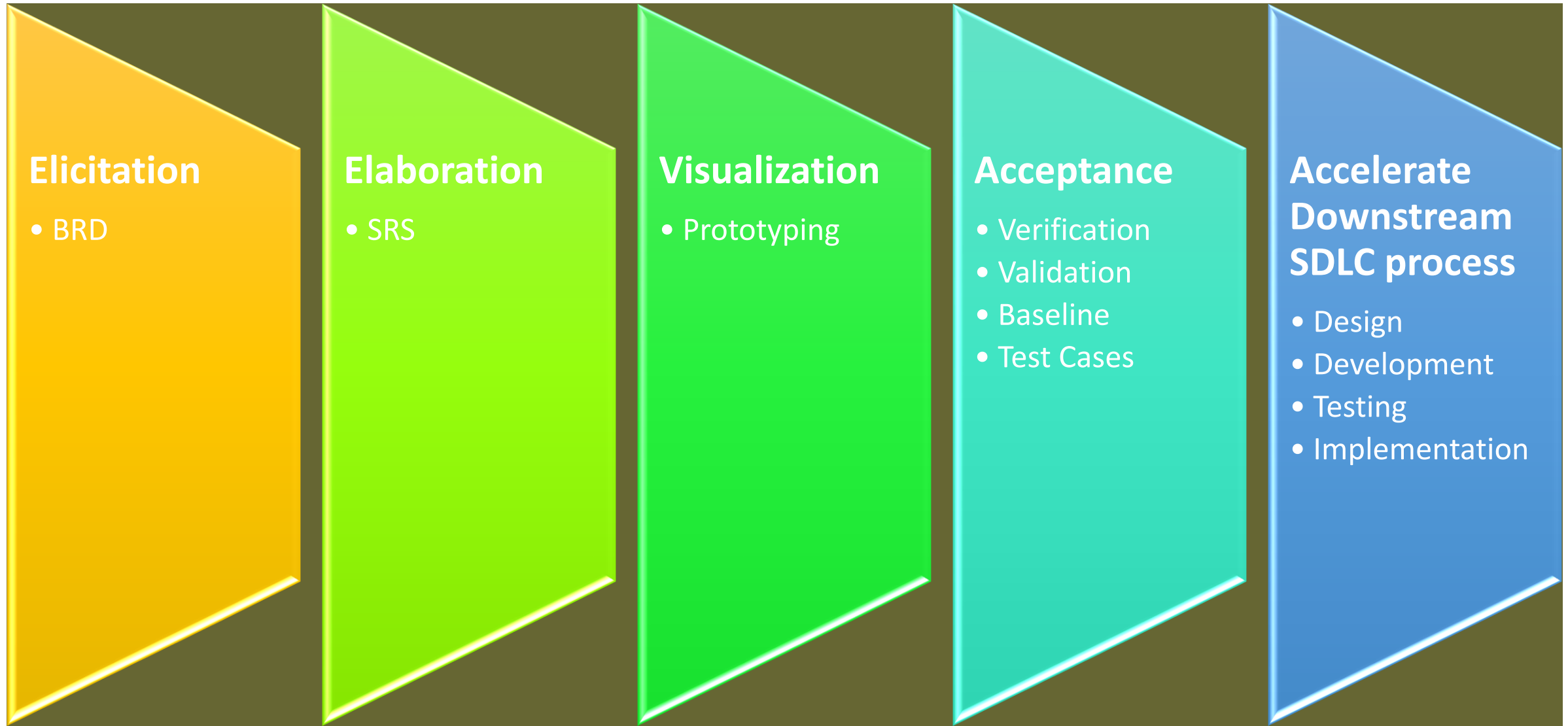
Requirement Development

Requirement Management

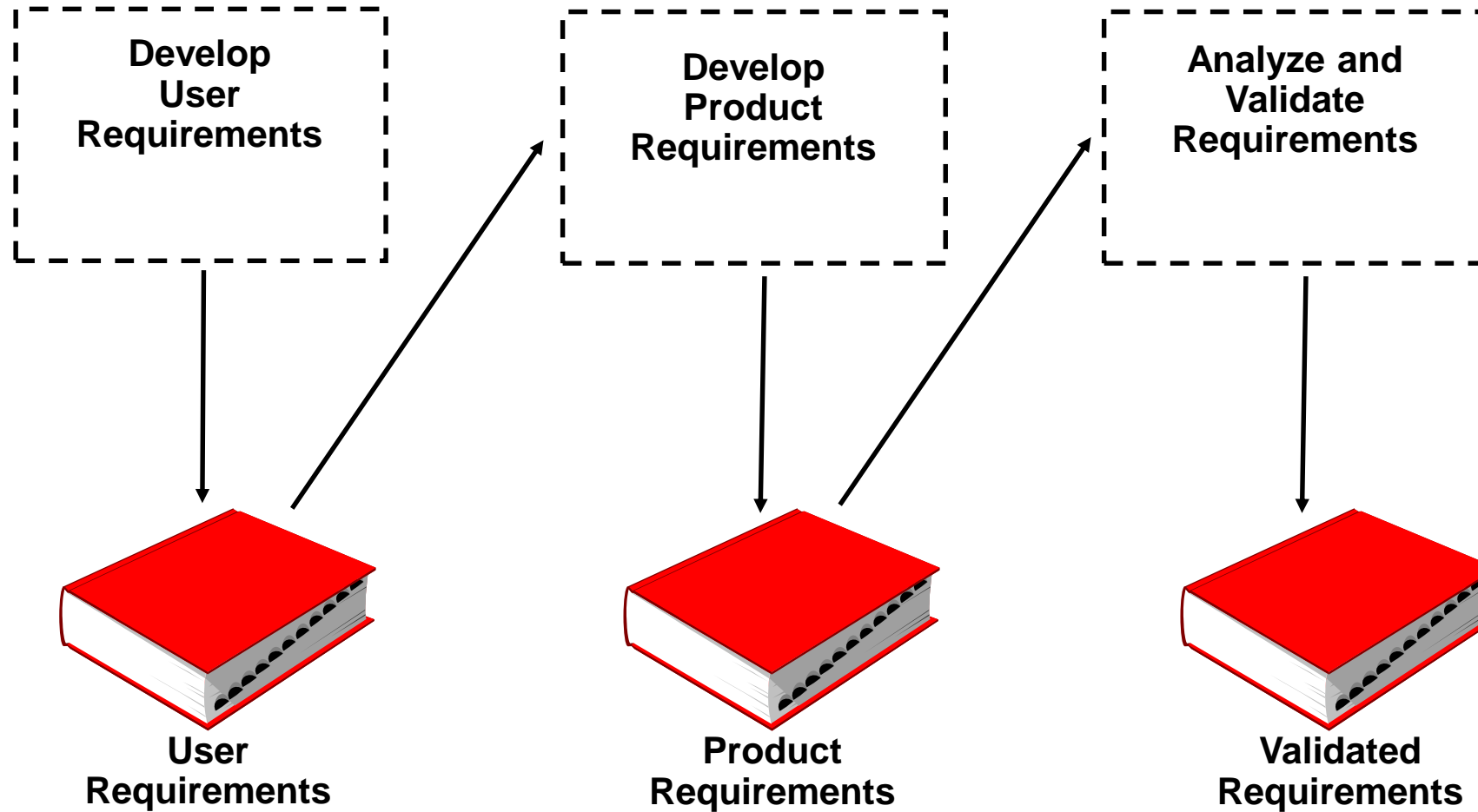
Requirement Engineering



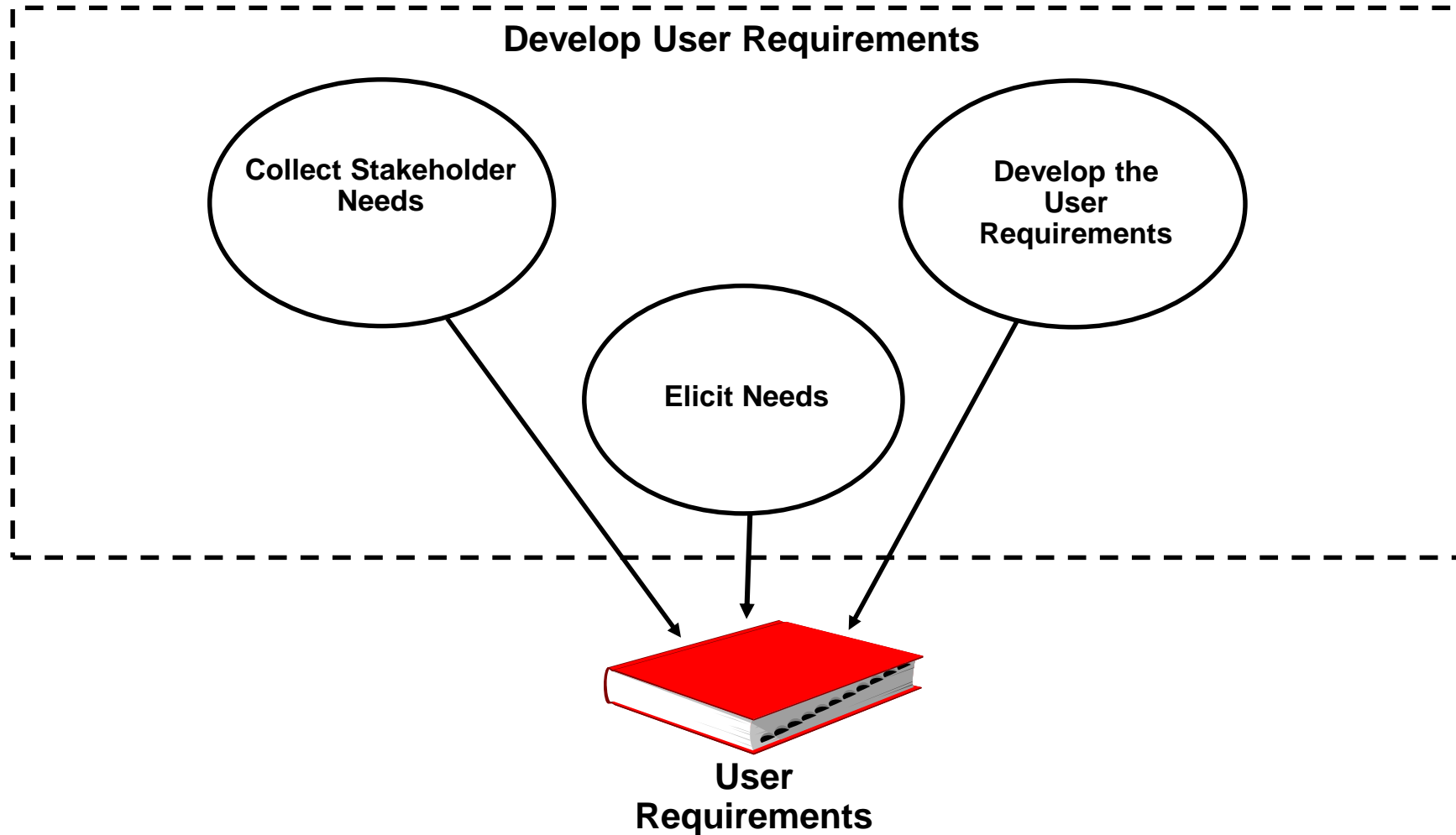
Requirement Development



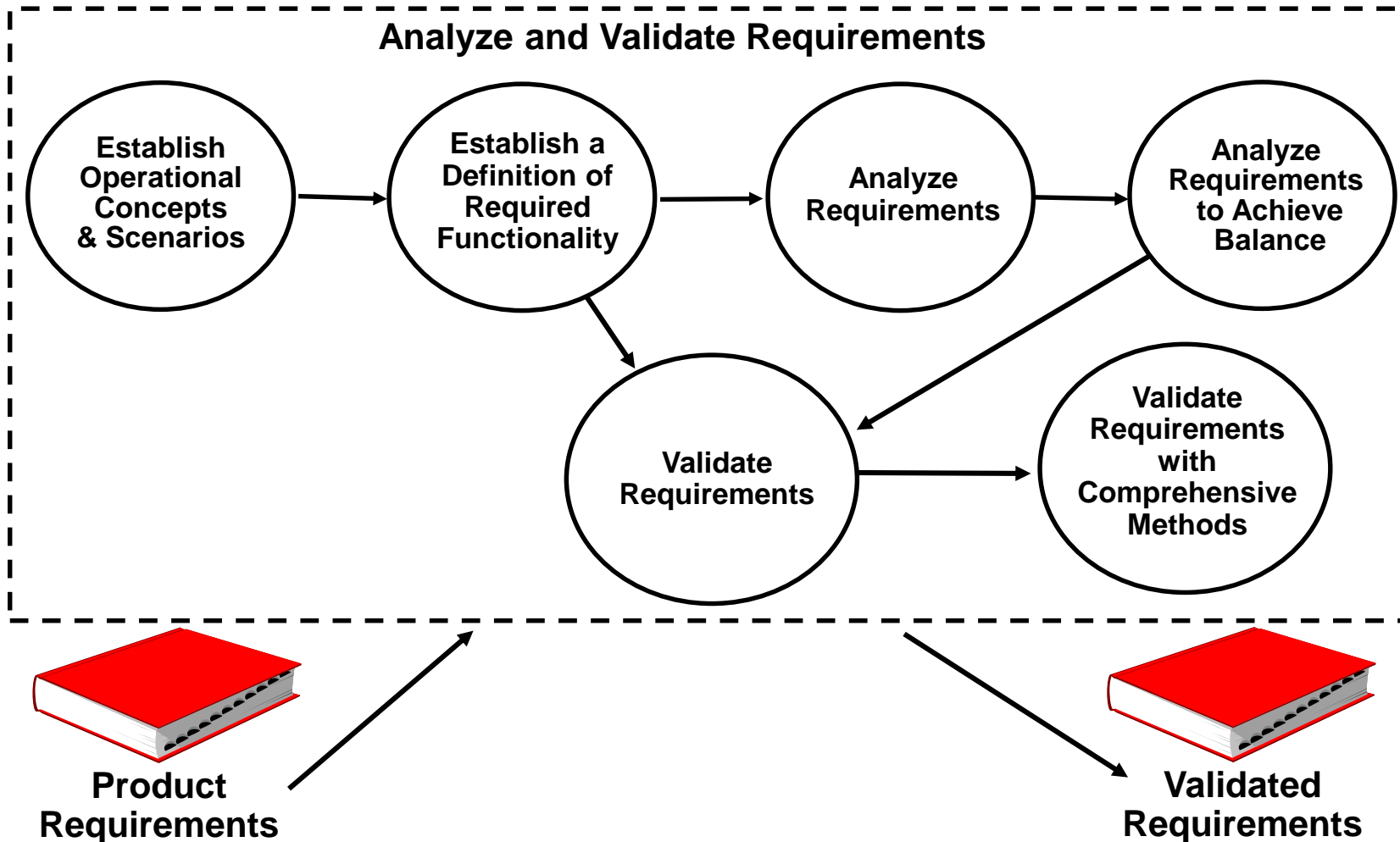
Requirements Development



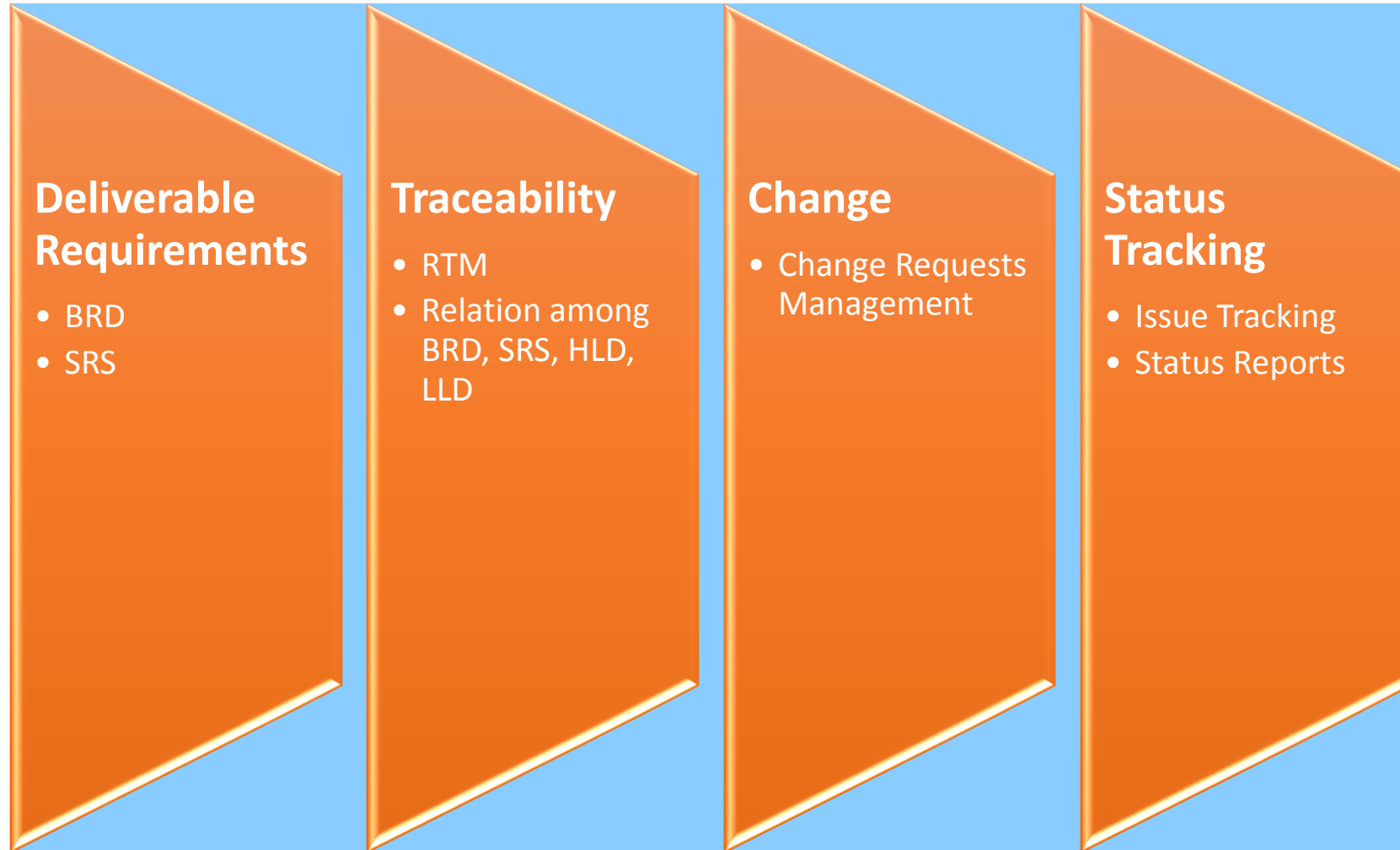
Develop User Requirement



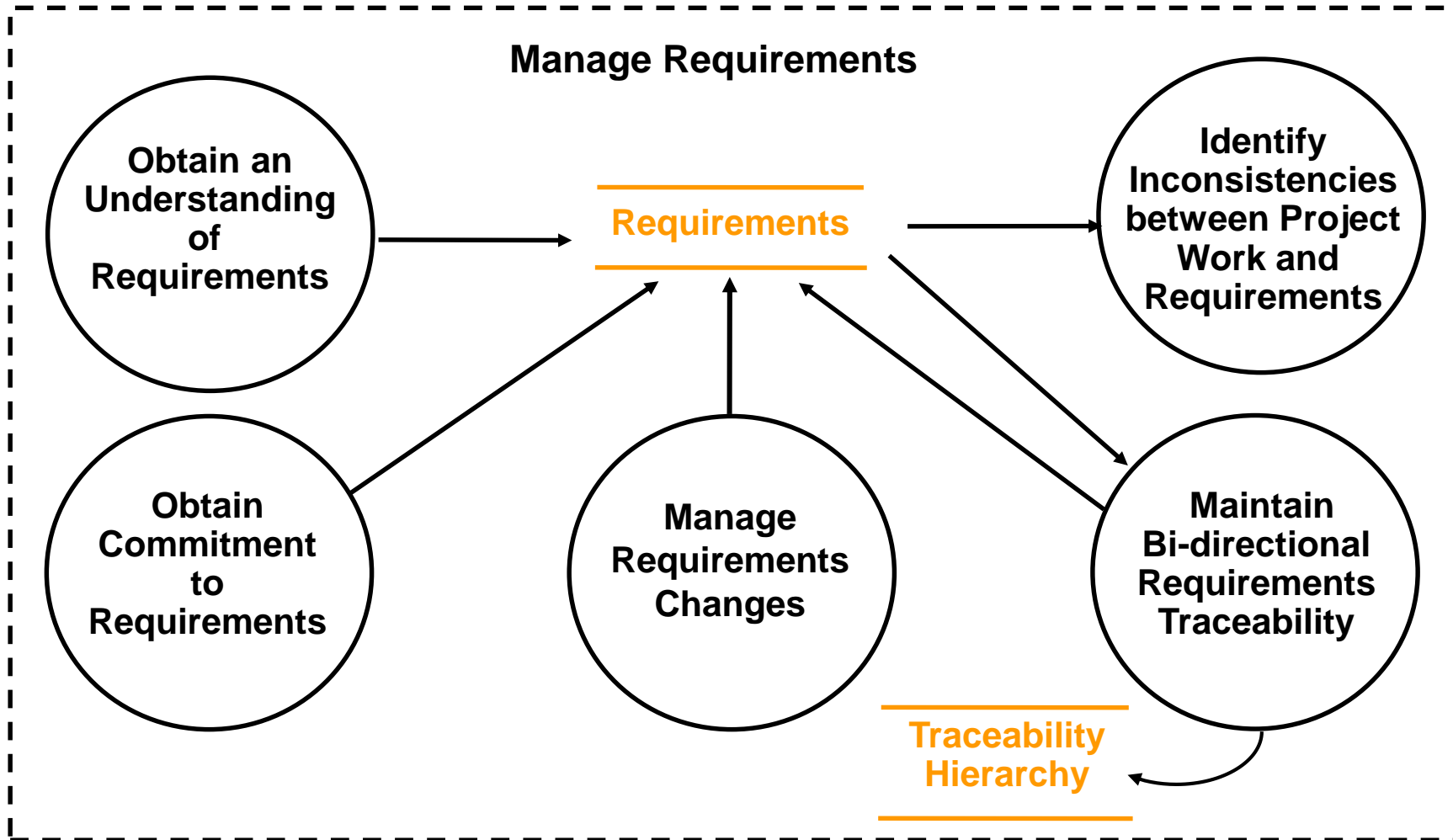
Analyze & Validate Requirements



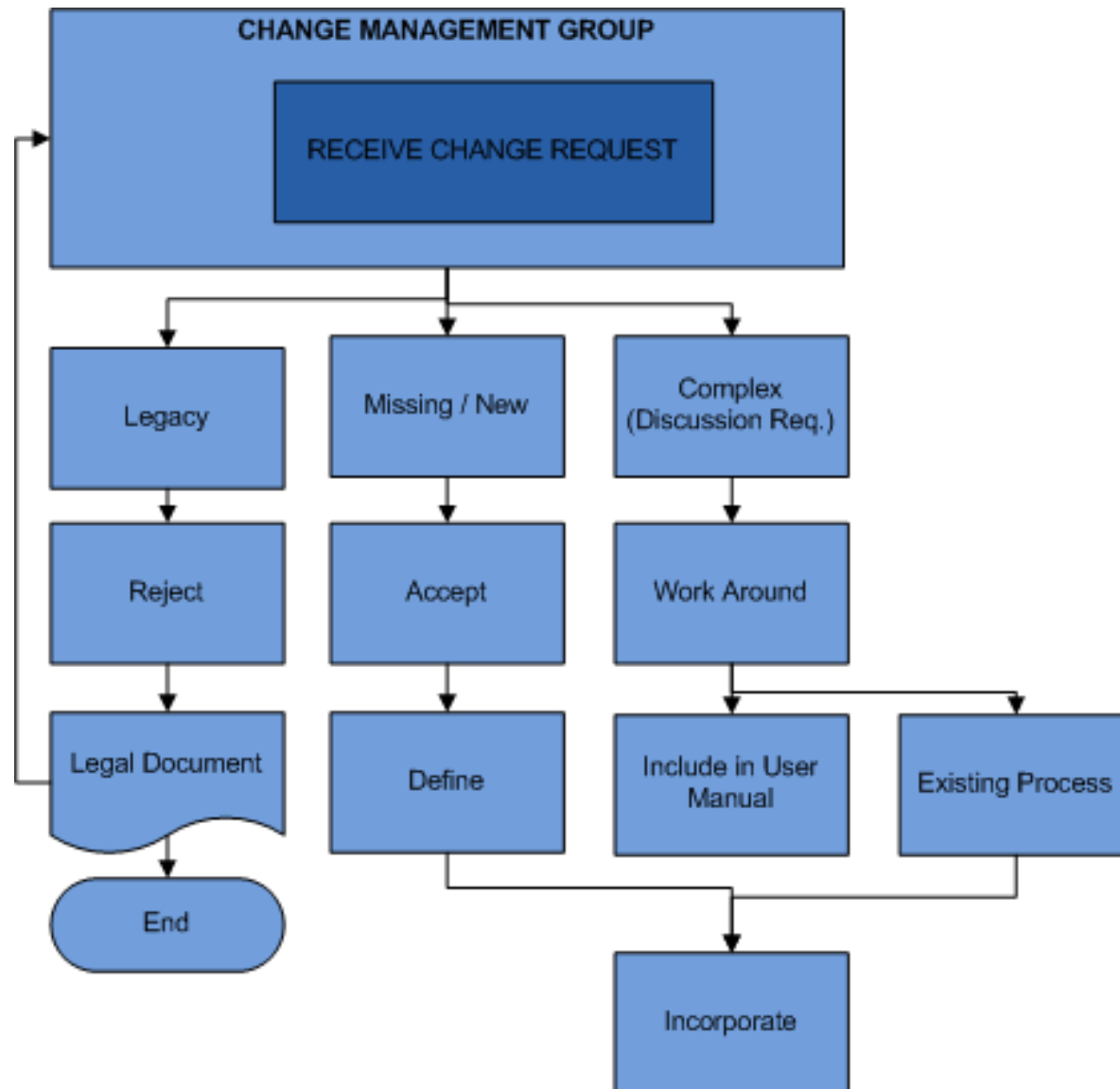
Requirement Management



Requirement Management



Requirement Change Management



How are all related ?

