

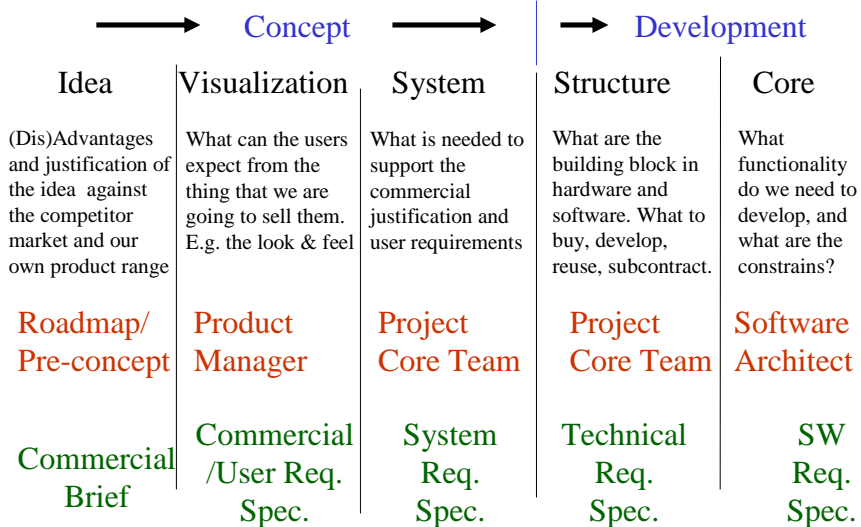


Hierarchy of Requirement Documents

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Evolution of Requirements





Idea

(Dis)Advantages and justification of the idea against the competitor market and our own product range

- **Clients.**
How many, Which?, Countries (req), Standards
- **Competitors.**
- **Benefits, Cost price, Development Costs.**
- **Market Introduction, Sell period, Feature Introduction, After Care.**
- **Interaction.**
With our own products, with other commercial products

Roadmap/ pre-concept results in **Commercial Brief**



Visualization

What can the users expect from the thing that we are going to sell them.

- **User interface and User Functionality.**
Use cases, Simulators, Mockup models, etc.
- **Interfaces.**
Possible expansion, interaction with its environment.
- **Product environment.**
Temperature, humidity, Size, Life span, Operating system, Size, Color, EMC, etc.
- **Product variance and feature availability.**
What variants will be developed.

Product Manager writes **Comm/User Requirements Specification**



System

What must it be able to do to support commercial justification and user requirements.

- **Functionality described**
What is the basic functionality needed
- **What is reusable from other products.**
- **Commercial Off The Shelf products to include.**
- **Product Quality, reliability, Environment.**
To what standards must it comply.

Project Core Team writes **System Requirements Specification**



Structure

What are the building blocks in hardware and software, reuse, subcontracting, interfaces, upgrading, etc.

- **Functional decomposition in blocks.**
What do the blocks, Data storage, Data Processing
(What, not how!!!)
- **What to do in hardware and what software.**
Reusable blocks specified, Subcontracting, COTS, etc.
- **Interfaces.**
Specifications, standards, between which blocks, restrictions.

Project Core Team writes **Technical Requirements Specification**



Core

What functionality do we need to develop, and what are the constraints?

- **Design and Specification of all architectural blocks.**
A specification of each block (functionality, input, output, sequence),
Interaction/relations/constraints between blocks,
The use of common resources,
Parallel development of the individual blocks,
Future improvements/enhancements.
- **Integration and Test Structure.**
What are logical functional components,
Creation and integration sequence (integration tests),
Testability of the building blocks (module tests),
Test sequence: primary functionality, stubs, drivers, etc.

SW Team Architect writes **Functional Requirements Specification**



Detail

What functionality do we need to develop for a module, and what are the constraints?

- **Design and individual SW modules.**
Interaction/relations/constraints between blocks,
The use of common resources.
- **Module Test.**
To ensure a correct functionality.

SW Developer writes **Functional Module Specification**

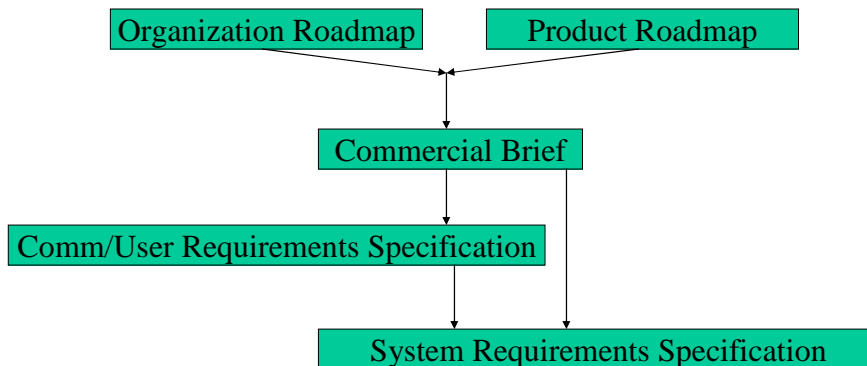


Global Constraints

- The product (range) must comply to the organizations logistic structure/philosophy.
(Product Creation Process, SAP, preferred suppliers)
- Every requirement must be testable or verifiable.
(temp >+270K <+300K)
- Every low-level requirement must have a relation with at least one upper-level requirement.
(Put sound level to zero -> Mute)
- The structure must comply to the organizations architecture and hardware policy.
(The use of Company IC's, Operating Systems, Patents, etc.)
- The structure must comply to the organizations Software Development Environment.
(Development Manual, Tools, etc.)

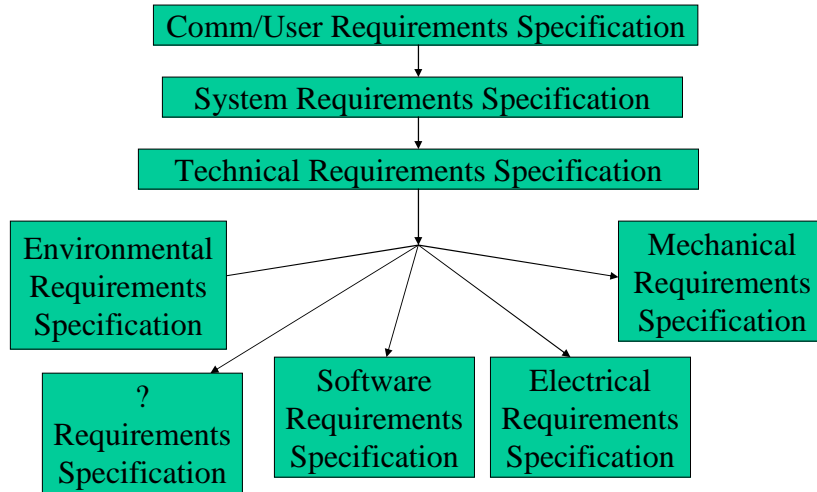


Commercial Aspects

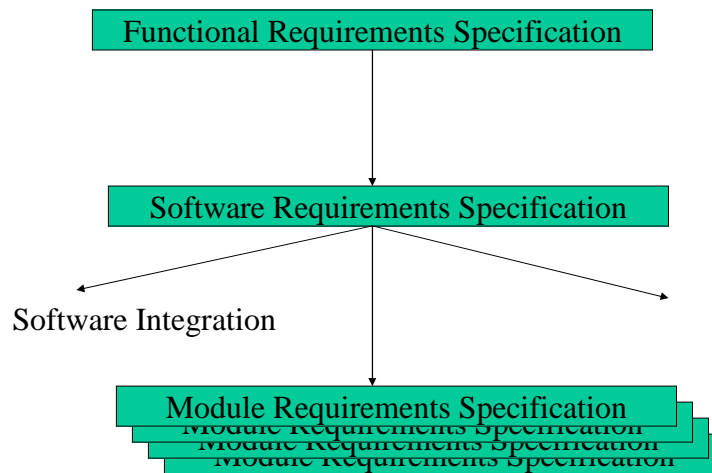




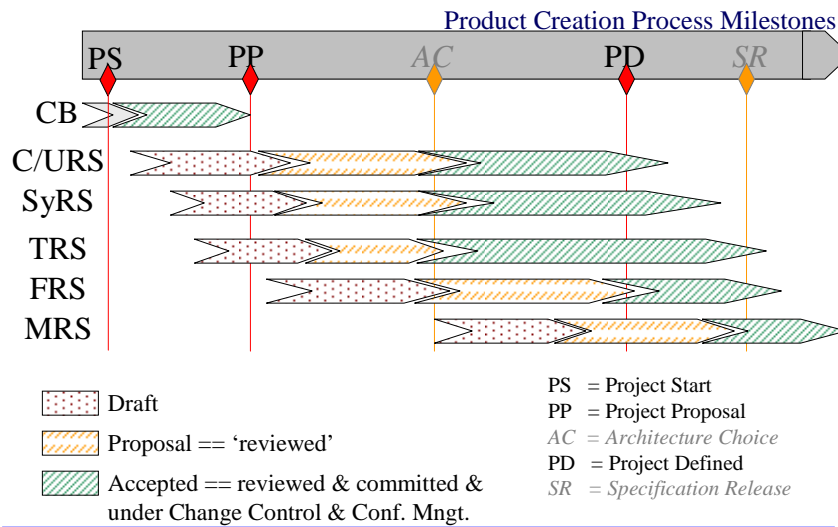
System Aspects



Software Aspects



Req. deliverables and the PCP



Contact Information

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