Abstract

An elicitation method for needs is described using many different viewpoints. A selection process with a coarse and a fine selection is described to reduce the specification to an acceptable and feasible subset.
Complementary Viewpoints to Capture Requirements

- **top-down**
  - key-drivers
    - (customer, business)
  - operational drivers
    - (logistics, production, etc.)
  - roadmap
    - (positioning and trends in time)
  - competition
    - (positioning in the market)

- **bottom-up**
  - regulations
  - "ideal" reference design
  - prototyping, simulation
    - (learning vehicle)
  - existing systems

Needs

Continued Product Creation Process

Feedback
Requirement Selection Process

- customer needs
- operational needs
- roadmap
- competition
- strategy
- product specification
- need
- characterization
- requirement phasing
- Technology, People, Process
- costs and constraints

Version: 0
August 21, 2020
REQselection
Examples of Quantifiable Aspects

- Value for the customer
- (dis)satisfaction level for the customer
- Selling value (How much is the customer willing to pay?)
- Level of differentiation w.r.t. the competition
- Impact on the market share
- Impact on the profit margin

Use relative scale, e.g. 1..5 1=low value, 5 - high value
Ask several knowledgeable people to score
Discussion provides insight (don't fall in spreadsheet trap)