III. Finding Overlooked Requirements

Rule 1: The customer is always right.

Rule 2: If the customer is ever wrong, refer to Rule 1.

- Stew Leonard's Dairy Store

What We Mean By System Quality

- Fits system specs
- Runs efficiently
- Doesn't blow up
- Follows standards
- Current technology
- Modern techniques
- Easily modified
  - without code change
  - when code changes

What Others Mean By System Quality

- Does what needs to be done correctly
- Performs adequately
- Reliable/consistent
- Easy to use
- Supported quickly and correctly
- On-time, in budget

Users, Customers, Stakeholders

- A *User* is anyone who uses the product
- A *Customer* is anyone (internal or external) who uses or is affected by my work or work product
- A *Stakeholder* is anyone whose opinion of my work or work product matters

***All* Users *are* Customers,**
***but there can be* Customers *who are not* Users.**
***All* Customers *are* Stakeholders,**
***but there can be* Stakeholders *who are not* Customers.**

✪ *Identifying All Stakeholders*

Who are the Case's Stakeholders?

-
-
-
-
-
-
-

✪ *Quality Dimension: Quality of* ***Design*** *(What's it need to do)*

- Required functions, capabilities, and performance levels defined appropriately
  - needs of all stakeholders identified
  - definitions accurate and complete
  - meaningful common understanding
- Design suitably meets requirements
- Costs/benefits/schedules are accurate
- Trade-offs based on adequate information

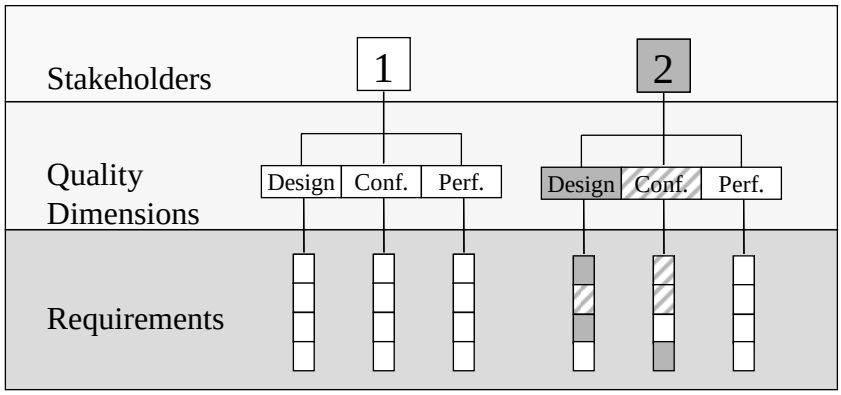
✪ *Quality Dimension: Quality of **Conformance** (How it's produced)*

- Products conform to design
- Products apply standards/conventions
- Workers use expected skill and care
- Workers apply defined methods, tools
- Management uses appropriate practices
- Product is delivered on-time, in-budget

✪ *Quality Dimension: Quality of **Performance** (How it's delivered)*

- Product is available as needed for use
- Product works in intended manner
- Product works reliably and accurately
- Product handles workload adequately
- Product is supported and maintained responsively

How Requirements Get Missed



- Overlooked
- Misdefined
- Defined Correctly

✪ What are business and temporal event triggers?

When There's No Definition of "Right," Create a "Strawman"

- Reasonable guess of what requirements might be--no assurance they are right
- Match to what has been defined
  - Reasonably present confirms it has been addressed, assume appropriately
  - Not reasonably present indicates need to examine more fully
  - Sample: One problem may signal more
- Forcing concrete examples challenges assumptions that we've addressed them

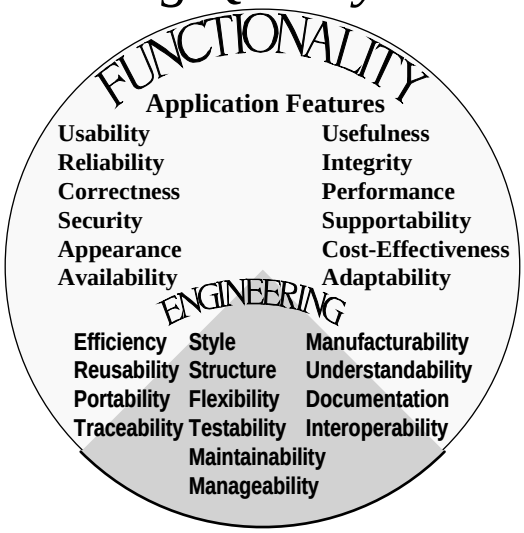
Exercise: Identify <u>Strawman</u> Requirements for Stakeholder _____

Quality of Design

Quality of Conformance

Quality of Performance

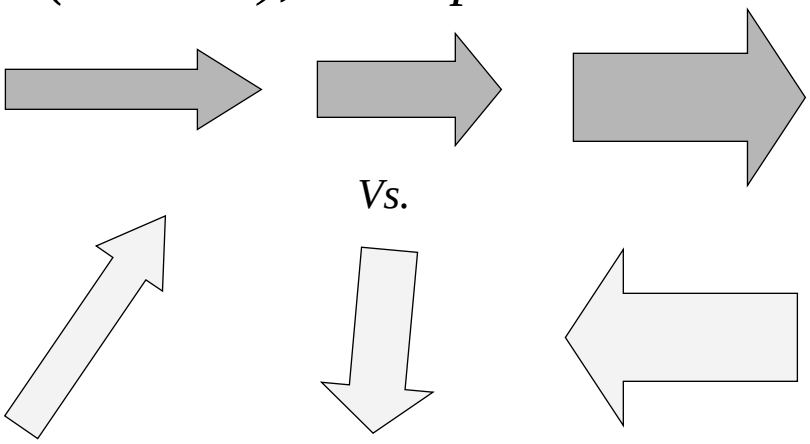
✪*Addressing Quality Factors*



Exercise: How Well Do Requirements Address Each Relevant Quality Factor?

Quality Factor	Usage User/ Situation	Strawman Requirements	Addressed Adequately?

✪*Aligning Strategic, Management (Tactical), and Operational Needs*



Create Strawmen for each

Environments: Requirements vs. Design

- Infrastructure
  - Operating system, network, language, tools
  - Database, data sources, data compatibility
- Interfaces, protocols
- Preferences
  - GUI standards
  - "Buzzwords"

✪ Physical/biological

- Screen, report layouts
- Database structure
- Module/object
  - Definition, flow
  - Internal structure, logic
  - Coding techniques
  - Naming conventions
  - Interface detail

✪ Cultural/political

✪ *Including Commonly Overlooked Deliverables*

- Backup and recovery
- Security
- Distribution
- Installation
- Training
- Documentation
- Online Help

✪ Interfaces with other systems

✪ Special capabilities and calculations

✪ 3rd-party access and auditing

✪ Conformance to laws and regulations

2. Buyer is able to enter orders for and capture name, address, and telephone number information about vendors whose vendor number is not known

3. Each new P.O. has the next sequential P.O. number.

4. Buyer can print a P.O. in the field without being connected to HQ:
   a. Only on request.
   b. For individual P.O. numbers, annotated if a duplicate printing.
   c. For all unprinted P.O.s for the specified vendor.

5. Buyer can obtain item descriptive information and current on-hand quantity per location for any item currently bought by the buyer:
   a. By specific SKU.
   b. By style for all items bought from the vendor.
   c. By item description for all items bought from the vendor.

6. Each buyer has access to all items for all departments/classes the buyer is responsible for and has no access to information for items which are other buyers' responsibility.

7. For each item to be ordered:
   a. Item is assigned the next sequential line item number.
   b. Information may be reviewed and modified until the order is issued.
   c. Capture style and description for items that have not been ordered previously.
   d. Use previously captured style and description for previously ordered items.
   e. Calculate total quantity across stores.
   f. Calculate extended cost and extended retail.

8. For the order as a whole:
   a. Calculate total extended cost.
   b. Calculate total extended retail.
   c. Allow the order only if within open-to-buy budget.

9. Report new orders and new vendor and item information from the field to HQ; and report to the buyer current on-hand quantities and newly assigned vendor numbers and SKUs.