

Understanding Requirements and Implementation from a Vendor Perspective

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Definition

Requirement:

- 1) “a thing demanded or obligatory”
- 2) “a need or necessity”
- 3) “a thing desired or needed”

Source – Dictionary.com

Types of Requirements

From the Business Perspective

- Business Requirements
- User Requirements

Describes what must be accomplished to add value to the business or user

From the Solution Perspective

- System Requirements – Higher level
- Functional Requirements – Lower level
- Interface Requirements
- Non Functional Requirements

Specifies what the delivered solution must be able to do and how well it must perform its functions

What Makes A Good Requirement?

SMART requirements

- Specific
- Measurable
- Attainable
- Relevant
- Time Bound



What Makes A Good Requirement?

Characteristics of good requirements

- Cohesive - One and only one thing is addressed
- Atomic - No use of the word “and”
- Complete - The requirement is fully stated
- Testable - Must be able demonstrate the requirement is met
- Unambiguous - Correctly stated without jargon. Expresses facts
- Traceable - Requirement meets a business need
- Feasible - Can be implemented within project constraints

Implementation Neutral – Describe “What” **NOT** ‘How’”

Examples

Good:

“The system shall capture the format of an ingested file”

Not So Good:

“The system shall be user friendly”

“The system shall ingest records quickly”

Requirements Gathering Process

1. Identify Stakeholders

e.g. Content providers, Archivists, Records Managers, IT, Researchers, Legal

2. Conduct Stakeholder Interviews

Identify the needs

3. Document Business Processes

“As Is” and “To Be”

4. Develop a Concept of Operations

Describes the operation of the system from a user perspective

Requirements Gathering Process

5. Develop Use Cases / Stories / Scenarios

A good mechanism for eliciting requirements

6. Document Policy

e.g. Selection, Retention, Regulatory, Legal, standards,
Enterprise Architecture

7. Generate a Glossary of Terms

Facilitates unambiguous requirements

Provides a mechanism for common understanding

8. Develop a requirements structure

Based on business needs / Functional area

Starting Point

OAIS – Open Archival Information System

TRAC – Trusted Digital Repository Audit and Certification

DoD 5015.2 – Baseline requirements for records management applications

MOREQ – Model Requirements for the Management of Electronic Records

GARP – General Accepted Recordkeeping Principles

SAA Glossary of Terms (<http://www.archivists.org/glossary>)

Classify / Prioritize Requirements

- Wish list will be bigger than your budget / timeframe
- Set a realistic scope
- Assign a priority to each requirement
 - Mandatory
 - Desirable
 - Optional
- Adopt an incremental / phased approach

What About Implementation?

- Three primary approaches
 - Self
 - Vendor
 - Collaborative
- Approach depends on level of in house expertise
- Build v Buy
 - Decision driven by requirements
 - Is a COTS solution good enough for my needs?

Suggestions

- Adopt an Incremental approach
 - Start with a core set of essential and manageable functions
 - Add complexity and desirables over time
 - Learn from each increment
 - Adapt requirements as necessary
 - Gain early and frequent insights into implementation
- Consider prototyping or pilots
 - Engage with a small set of end users
 - Vehicle to test concepts / ideas
- Don't ignore change management
 - Provide users with a sense of investment
 - Provide effective training