

# 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