ITS Virtual Project Management Office Newsletter

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An AVP's Perspective

"Did I meet the customer's requirements to their satisfaction?"

This is the primary concern of every sponsor and project manager (PM) and ultimately determines the success of a project. If you've followed a solid project management framework, you'll be well on your way to having a successful answer to that question. Defining requirements helps ensure that what the sponsor envisioned is what the project will deliver.

There are many approaches to gathering project requirements from interviewing people who will use the future solution, researching market place offerings and best practices, and outlining where data is stored.

Requirements should include enough detail so that everyone involved will have a good understanding of what the project will deliver and align with the project's success factors which provide value and benefits to the university.

Daniel M. Vonder Heide
AVP, Infrastructure Services

EMERGE COURSE DATES

Take a Project Management class to learn the basics or advanced tools, techniques, and resources to successfully run a project.

♦ October 24

♦ November 5

To register, visit
LUC.edu/emerge

BUSINESS REQUIREMENTS

Heather Tomley Chester, Sr. PM

The initial business requirements of the project will answer several questions:
- Why are we doing this project?
- What's the business benefit?
- What's the risk(s) if we do not implement this project?
- What is the scope of the project
- Which groups, processes, services will benefit from this project?

Business requirements are:
- Quantifiable
- Measurable
- Define Project Success Factors (how do we know we are done)

Many groups provide requirements to ensure all details are discussed and coordinated for the project's success.

The image below identifies the differences between Business Requirements (what needs done) and Functional Requirements (how it will be done).

Business Requirements	VS	Functional Requirements
High-level Business Benefits		Specific and Detailed info to Fulfill Business Needs
What Does the University Want to Do?		How Should or Can it be Done?
Outlines the Business Problem or Opportunity		Details the Solution or Software being Developed
Point of View Customer or Sponsor		Point of View System, Process, or Department

FUNCTIONAL REQUIREMENTS

Florence Yun, Sr. PM

Functional requirements are requirements which describe what something should be able to do. Functional requirements can consist of a detailed breakdown that includes a list of steps that users will follow to perform a function of the system or its component. Functional requirements explain how the outcome of a project will operate to meet the specified business requirements.

Often, functional requirements are lumped together with user requirements. Functional requirements describe what the system must do. User Requirements describe the end-user requirements for a system.

There are many examples on the web that can assist you with gathering your business, functional, user and technical requirements. The VPMO website also has many templates Project Management Templates that can help you with managing your project.

TESTING REQUIREMENTS

Mary Bunker, Sr. PM

Testing based on the requirements is a testing approach in which test cases, conditions and data are derived from the requirements.

The stages of requirements based testing are as follows:

1. **Defining Test Completion Criteria –** The specific conditions that need to be fulfilled for testing to be complete.

2. **Designing Test Cases –** Creation of test cases that include the following: the actual test (including preconditions, data and inputs) and the expected results and actual outcomes.

3. **Verifying Test Coverage –** Verification that the tests cover both functional and non-functional aspects of the requirement. A traceability matrix is a useful tool for associating test cases to different requirements to ensure adequate test coverage.

4. **Executing Tests –** Execution of the test cases and documentation of the results.

5. **Verifying Test Results –** Verification of the expected results versus the actual test results.

6. **Tracking and Managing Defects –** Management and tracking of any defects detected during the testing process all the way to resolution. Statistics maintained on the defects can help provide a picture of the overall status of the project.

Using the above approach in testing requirements will ensure coverage of the requirements as well as establish quality and provide confidence in the final product.

TECHNICAL REQUIREMENTS

Warren Francis, PM

Technical requirements are the technical issues that must be considered to successfully complete a project. Technical requirements are also known as quality of service (QoS) requirements, service-level requirements or non-functional requirement. Technical requirements can be anything from performance, reliability, or availability issues that your project must meet on in order to proceed with a project.

An example of a technical requirement is an application must run on XYZ computer. Whenever you have a requirement based purely on technology, try to determine the real underlying business needs being expressed.

Ask why it must meet this need, if an application must run on iOS for example, the reply would be that you only have iOS devices.