



Performing System Pre-Implementation Reviews

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Agenda

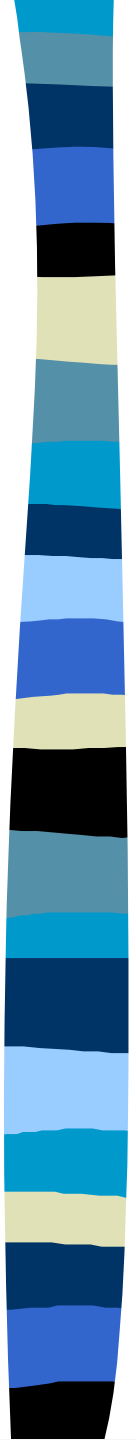
- Introduction
- Pre-Implementation Basic Objectives
- Pre-Implementation-Project Management Review
- Other Keys to Success
- Questions and Answer

Introduction

■ Purpose

■ Goals

■ Methods





Pre-Implementation Basic Objectives

- Security
- Change Control
- Data Integrity/Data Conversion
- Back-up Recovery
- Documentation/Reporting
- Staffing Skills
- Technical SDLC



Pre-Implementation Review Project Management Requirements

- Strategic Planning
- Requirements Management
- Project Planning
- Communications
- Risk Management
- Subcontractor Management
- Tracking and Oversight
- Software Configuration Management
- Quality Assurance
- Transition to Support

Software Development Life Cycle

Plan

Build

Maintain

Strategic Plan'g #

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Requirements Management

Project Planning

Communications

Risk Management

Subcontractor Management

Tracking and Oversight

Software Configuration Mgt.

Quality Assurance

*Transition to Support**

Audit Involvement

High Level Implementation Review

Implementation Audit



**Pre-Implementation Review Project
Management Requirements
Objectives and Criteria**



Project Management Requirements

Strategic Planning

Objectives

- To establish project goals and objectives that are aligned with Company's strategies.

Auditable Evidence

- The goals and objectives of the project are documented and linked to the goals and objectives of the impacted business units.
- The goals and objectives of the project are congruent with the Company's strategic plan and/or the strategic plan for the IT environments.



Project Management Requirements Requirements Management

Objectives

- To establish among the customer, project team and vendor a common understanding of the business requirements that must be satisfied by the software product.
- To maintain a common set of expectations among all project stakeholders related to the business requirements that must be satisfied by the software product.

Auditable Evidence

- Initial requirements are documented, approved and communicated. (*DEVELOPMENT*)



Project Management Requirements Requirements Management

Auditable Evidence *(continued)*

- Maintenance /enhancement changes are documented, classified, prioritized and incorporated into a release strategy; including a process for adequate control of emergency fixes. (*MAINTENANCE*)
- An ongoing procedure for ensuring the customer's review and approval of the project development is established and followed.
- A process for evaluating proposed changes to the requirements is documented and communicated.
- Changes to the requirements are reviewed, approved and communicated according to the established procedure along with necessary revisions to schedules and budgets.



Project Management Requirements

Project Planning

Objectives

- To establish reasonable plans for managing the software project, ensuring that all elements of the project are included.
- To establish a control process for modifying the project plans and communicating the changes.

Auditable Evidence

- A business case that objectively evaluates all reasonable alternatives is prepared, communicated and approved.
- Best Practice and Lessons Learned experiences are reviewed and considered in the project planning.



Project Management Requirements

Project Planning

Auditable Evidence *(continued)*

- An integrated project work plan is documented, approved and communicated.
- A project technical architecture plan is documented, approved and communicated.
- Project assumptions, estimates, budgets and milestones are documented, approved and communicated.
- The roles and responsibilities of the project team organization are documented, agreed to and understood.
- Changes to the project plan are documented, approved and communicated according to a documented procedure.
- The applicable methodology, tools and resources to meet the project objectives are identified and utilized.



Project Management Requirements Communications

Objectives

- To define appropriate communication strategies and plans including the customer, the project team, IT support groups and external vendors.
- To establish processes for the timely generation, collection, dissemination and storage of project information.

Auditable Evidence

- Project stakeholders are identified and their information needs analyzed.
- A communications plan is developed and approved.



Project Management Requirements Communications

Auditable Evidence *(continued)*

- Coordination mechanisms with impacted groups/initiatives are established.
- Reliable and accurate information is communicated to stakeholders and team members in a timely manner.



Project Management Requirements

Risk Management

Objective

- To identify risks at the earliest possible time and implement a risk management process to effectively deal with risks in a positive manner throughout the life of the project.

Auditable Evidence

- The risks associated with cost, resources, schedule and technical aspects of the project are identified, assessed and documented.
- The risk environment is continuously monitored for changes.
- Risk mitigation actions are documented and communicated.



Project Management Requirements

Subcontractor Management

Objectives

- To select qualified subcontractors and execute contracts with the selected subcontractors that clearly define requirements and deliverables.
- To monitor the subcontractor work progress with a workplan.

Auditable Evidence

- The subcontractor selection process, criteria and results are documented.
- Appropriate legal and contracts personnel are involved in contract negotiations and executions.
- The subcontractor is provided necessary information regarding Company standards and guidelines.
- A documented subcontractor work plan, consistent with SDLC expectations, is reviewed and approved.



Project Management Requirements

Subcontractor Management

Auditable Evidence *(continued)*

- A contractual agreement based upon the defined requirements is used for managing the subcontractor and clearly defines the roles and responsibilities of all subcontractors.
- Changes to the contract terms and conditions are resolved according to a documented procedure and communicated.
- Management conducts periodic reviews (status/coordination/technical) with the subcontractor focused on assessing progress toward and accomplishment of project milestones. Vendor payments are dependent on the satisfactory results of these reviews.



Project Management Requirements Tracking and Oversight

Objective

- To provide adequate visibility into actual progress and cost so management can take timely and effective actions if the project's performance deviates significantly from the plans.

Auditable Evidence

- Appropriate oversight mechanisms are implemented and operate effectively.
- Performance against the project plans, milestones and budgets is continuously tracked and corrective actions are taken when significant deviations occur.
- Changes to commitments are agreed to by the affected groups and individuals prior to any work plan revisions.



Project Management Requirements Tracking and Oversight

Auditable Evidence *(continued)*

- Formal reviews are conducted at selected project milestones to assess progress, accomplishments and risks.



Project Management Requirements Software Configuration Management

Objective

- To systematically control changes to the software products and maintain the integrity and traceability of the products throughout the life of the product.

Auditable Evidence

- Responsible individuals are trained to manage the product's software baselines and in the use of software configuration management (SCM) tools.
- An SCM plan is developed, approved and communicated.
- Measurements are made and used to determine the status of the SCM activities.



Project Management Requirements Quality Assurance

Objectives

- To provide management with appropriate visibility into the quality of the processes being used and the product being developed.
- To determine if the software products satisfy business requirements prior to acceptance and transition to support.

Auditable Evidence

- Test plans and acceptance criteria are documented and approved.



Project Management Requirements Quality Assurance

Auditable Evidence *(continued)*

- Satisfactory test results are achieved.
- Project self-critiques are performed at key milestones and at completion.



Project Management Requirements Transition to Support

Objective

- To provide for the effective transition of the software products from the development life cycle to the planned support organization.
- To manage the application in a proactive, controlled manner.

Auditable Evidence

- A production support plan with cost estimates and defined service levels is developed and communicated.
- A knowledge transfer plan is developed and executed.



Project Management Requirements Transition to Support

Auditable Evidence *(continued)*

- Appropriate documentation is developed, reviewed and approved.
- The roles and responsibilities of the support team, specifically including a named Solution Owner, are documented, agreed to and understood.



Other Keys to Success

- On-going relationship between IT Audit Professionals and Project Managers
- Be Understanding
- Timely and Creative Reporting



Questions and Answers