Chapter 7: Quality Project Review

Focus: This discussion addresses the quality project review, a scheduled, formal review that centers on project performance and quality metrics and which raises broad issues for executive and customer attention.

The Project Management System

- *A project management system is the backdrop for an effective project review. The project management system is a consistent approach and set of tools and techniques for planning and implementing task-oriented system development projects or professional services efforts with definable start and end points and distinct deliverables.
- When implemented across the company, a project management system provides a corporate wide way of thinking about the customer and about quality and a set of professional tools and techniques for identifying and meeting customer requirements in a predictable way.

Contd...

- Project managers are trained and developed in a consistent way, both in technical project techniques and in team leadership, and manage their projects using standard tools.
- A project management manual is used to communicate policies, procedures, and support systems, and the system is improved continuously using business process reengineering tools.

Issues in Project Reviews

- Find a balance in identifying project quality progress and information needs.
- Conduct effective project review meetings.
- Develop consistent applications of project management tools and techniques.
- Build a project manager pool attentive to quality.
- Coordinate projects across functions.

Senior management roles: Creating the conditions for project success

- The development of a professional services business relies on building relationships through successful projects.
- According to authors Englund and Graham, senior management is responsible for creating an environment for successful project quality through the following 10 roles:
 - 1. Leading the transition to a fully project-based organization
 - 2. Aligning projects with the company strategic business plan
 - 3. Understanding the impact of senior managers on the success of projects

Contd...

- 4. Developing a core project team process
- 5. Ensuring an effective project management organizational structure with clear lines of authority and responsibility
- 6. Developing a project management information and project review system that produces actionable information
- 7. Developing a plan for identifying project manager core competencies and a selection and development process
- 8. Developing a learning organization stemming from project management documentation and processes
- 9. Developing initiatives to improve the project management system
- 10. Developing senior management's ability to manage project managers

Project Management Phases: A Senior Management Perspective

- ☐ There are four basic project management phases:
- 1. Concept
- 2. Project definition
- 3. Design and implementation
- 4. Project closeout and follow-on
- ☐ Table 8.1 shows the major activities in each phase of a typical project.

TABLE 8.1 Project Management Phases and Activities

Phase 1: Concept	Phase 2: Project Definition	Phase 3: Design and Implementation	Phase 4: Close-out and Follow-on
Identify and clarify customer requirements and quality objectives	Project definition	Design concept	Financial performance
	Establish project team	Engineering studies	Project documentation
Planning and project selection	Detailed scope of work	Prototype and test	Lessons learned
		Installation plan	Obtain customer feedback
Generate new project concepts: product and professional services	Project plan	Delivery of services	Closeout books
	Quality plan	Earned value	Follow-on potentials
Screen and rank-order project concepts	Define work breakdown structure		
Broad scoping	Develop task list with		
Establish and maintain potential project list	interdependencies		
	Develop critical path		
	Develop responsibility matrix		
	Enter baseline data		
	Develop risk analysis		

Phase 1: Concept-Clarify Customer Requirements and Generate and Select Projects

Introduction to phase 1

- Senior management keeps the project pipeline full through a process of encouraging new services and product concepts and designs to be developed to meet customer needs.
- A customer-oriented project firm will stress the development of a long-term planning process to ensure that the highest-payoff projects are undertaken.

Identify and clarify requirements

- This step involves senior management focus on aligning projects so that they are consistent with corporate strategy and are grounded in customer requirements.
- → This can be accomplished by requiring that proposed projects define customer requirements clearly up front in the planning process.

Generate new project concepts

- Senior managers need to encourage a certain amount of "free spirit" thinking to create the conditions for innovative, forward-thinking project formulation.
- They can accomplish this by establishing incentives and recognition programs for new project concepts that align with company strategy.
- The process of rank ordering and selection should include formal presentations, preparation of proposals and justification material, and consistent criteria.

Broad scoping

Project managers should be encouraged to develop the capacity to broadly scope product and services projects in one- or two-page narrative formats that allow senior managers to make preliminary decisions to commit company resources.

Establish and maintain potential projects list

Potential projects are kept alive through a listing of potential projects, which is updated frequently. This is the pipeline of potential projects.

Phase 2: Project Definition

- This phase further defines the project, once approved, and fine-tunes the concept, schedule, budget, and team. Here is where the company integrates the project into its project "pipeline" and schedules the work and resources required in detail.
- Senior management's role here is to ensure that product development and professional services projects are defined and costed out clearly in terms of work breakdown, deliverable specifications, schedule, budget, and quality requirements.

Project definition and project scope statement

- □ The project scope statement is a brief description of the product deliverable or cost-reduction improvement. The statement includes the following information:
 - Background customer information
 - Description of work: What is to be done?
 - Unique requirements
 - Product and professional services information
 - Special considerations and issues

Establish a formal project team

Project teams should be formally established, authorized, and chartered in writing by senior management. The project manager is responsible for proposing the composition of the project team.

Conduct kickoff meeting

The project manager runs the kickoff meeting to communicate the requirements of the project and to discuss assignments, commitments, resource questions, and other issues relevant to completing the work.

Project plan

→ The project plan is a package including project goals and objectives, customer requirements, general product specifications, quality policy and plan, schedule and budget, risk-management plan, and team structure and roles.

Quality plan

→ The quality plan includes the quality standards relevant to the project. Inputs include quality policy, scope statement, product description, standards and regulations, and other process outputs.

Work breakdown and task list

- For complex projects, a summary work outline or breakdown structure (WBS) and a detailed task list unique to the project are developed. The work breakdown structure is a top-down outline of the steps in the project process.
- The task list, built from the work breakdown, indicates task name, duration, start and end dates, and interdependencies or predecessors.

Responsibility matrix

The project manager and the team create a responsibility matrix-or organization chart for the project-once all tasks are identified. This matrix is a formal assignment structure that indicates work flows and unit responsibility for each task.

Develop schedule

A detailed schedule is developed in consultation with appropriate stakeholders in the work, using the task list and project management, software if available. The schedule is displayed graphically as a Gantt chart.

Develop project budget

From resource assignments made to each task in the project management software, a project budget is prepared indicating the total cost of doing the work and ensuring the assigned profit margin. The budget is entered into the database system.

Develop risk analysis

During this phase, a risk analysis is prepared to anticipate the risk involved in the project and to prepare contingency plans. Risk analysis focuses on feasibility, technology, costs, quality problems, instability in customer requirements, and forecasting information that might have an impact on the project.

Phase 3: Design and Implementation

Introduction

Phase 3 is the design and implementation of the project deliverable(s), including products and professional services. It includes execution of the project scope and schedule and use and consumption of project resources.

Design

Design involves a detailed fleshing out of the outcomes desired and product and services design. Design includes a full description of the performance specifications for all products and systems, as well as a description of the kinds of professional services that will meet customer requirements.

Implementation

- Projects are implemented according to the schedule, sequencing tasks and monitoring progress at convenient gateways in the schedule.
- ☐ Senior managers should focus on critical issues during this process, including
 - Accomplishments
 - Earned value
 - Customer feedback
 - Performance feedback
 - Quality issues
 - Other actionable information

Phase 4: Project Closeout and Follow-on

Introduction

- Phase 4 should be seen as an opportunity to deliver the product and service and continue the relationship with the customer.
- The key issue in phase 4 is finding follow-on business development potential from the project deliverable, documenting lessons learned, and moving to the next level of customer partnership.

Financial performance

The project's financial performance is reviewed at this point, ensuring that revenue and profit margin goals are going to be realized. Corrective action includes reestimating cost to complete and finding cost-cutting measures if appropriate.

Document project

Software is documented, and a project history is prepared according to a template including, Project planning documents, scope, etc., Full files from each project phase, Financial data, Scheduling data, Quality data, Team performance information.

Lessons learned

- ◆ The project manager is responsible for documenting lessons learned in a special database of information updated by the project management team.
 - Unique lessons from this project
 - > Avoidable mistakes and failures
 - > Quality issues
 - Communication problems
 - Organizational issues
 - > Technology information

Obtain customer feedback

♦ A customer survey form is presented to the user or customer of the project. Senior management ensures that customer feedback is obtained and routed to the appropriate senior and project managers for appropriate quality control and management action.

Explore follow-on potential

♦ The project manager and team are expected to explore follow-on opportunities with the customer. Senior managers should lead this process, focusing project managers on marketing targets and helping to build partnerships with customers to further professional services opportunities.

Tools and Techniques

• From the senior manager's perspective, the key project planning management tools include the work breakdown structure (WBS), task list, Gantt chart, calendar plan, task usage chart, and earned-value analysis. Senior managers should ensure that project managers are trained in and can project management software tools to manage their projects and report on them.

Project Reviews for Actionable Information

- * The purpose of this section is to place special emphasis on focusing on the right information-termed actionable information-for senior project reviews.
- Actionable information is information that creates opportunities for senior management action to develop technology and marketing concepts and accomplish corporate business development goals and objectives.

Contd...

- Project reviews and reporting systems should focus on actionable information as follows:
 - → Status of project, issues, and plans
 - → Quality issues
 - → Marketing information
 - → Lessons learned in project management
 - → Information on competitive challenges
 - Project team performance
 - team membership
 - Opportunities for customer partnering
 - → Earned value