# Chapter 6: THE EIGHT STEP PROCESS

FOCUS: This chapter provides a description of the application of customer-driven project management

## Introduction

- \* Integration of total quality management environment, project management system, and customer-driven project management structure establishes the foundation for the application of the customer driven project management approach.
- \* The customer and the supplier must target a common focus for the project.
- Perpetual improvement of quality and productivity must be pursued by both the customer and the supplier.

## Customer Driven Project Management (CDPM)

- CDPM seeks a disciplined, structured, people-powered approach to project success.
- People within the customer and supplier firms perform as a customer-driven project team to improve the project.
- The solutions do not require expensive systems or equipment.
- Customer-driven teams are empowered to perform and improve the project and processes.

## **Focus**

- o The focus is the specific mission of the project.
- The setting of a focus for projects is the result of continuous process.
- CDPM starts with an agreement between a customer and a supplier for a specific project.
- The customer and supplier steering team usually develops the draft mission.

## Contd...

- Focus depends on the competitive market environment and the capabilities of the organizations.
- The customer's and the supplier's top management teams guide the project focus by determining the vision and draft mission, approving recommendations, and generally monitoring results.

### **Teamwork**

- ◆ The first team to be formed to perform the project is the CDPM lead team.
- ◆ Other required CDPM teams are established depending on the size, complexity, and the life cycle of the project.
- Developing a teamwork initially involves:
  - Developing a code of conduct
  - Reaching consensus on the mission
  - Defining roles and responsibilities.

## **CDPM Improvement Methodology**

- ► The CDPM improvement methodology blends the continuous pursuit of total customer satisfaction with the project completion.
- ► The CDPM improvement methodology finds, selects, analyzes, and implements project and process improvement opportunities concurrently and continuously.

## Phases of CDPM Improvement Methodology

- ◆ The eight phases of the customer-driven project management improvement methodology are:
  - → Phase 1: Define the quality issue
  - → Phase 2: Understand and define the process
  - → Phase 3: Select improvement opportunities
  - → Phase 4: Analyze the improvement opportunities
  - → Phase 5: Take action
  - → Phase 6: Check results
  - → Phase 7: Implement the improvement
  - → Phase 8: Monitor results

## Phase 1: Define the quality issue

- Input: draft mission statement from the customer and supplier project steering team.
- Process: the input is used in the process to
  - ✓ Establish the project mission
  - ✓ Form the customer-driven project lead team
  - ✓ Define the project deliverable
- Output: the output of this process is a project mission statement with a specific project deliverable definition.

#### Process

- → The focus of phase 1 is a statement of quality issue or a problem statement from the customer driven project lead team, which forms the basis of the mission of the project.
- → The customer-driven project leader from the customer's organization or the customer's voice assumes the leadership of the team.
- → It is important at this stage to ensure that all team members start to develop the interpersonal, team dynamic and customer-driven management skills necessary for success.

#### The project deliverable This involves:

- Define the top level project process.
- ✓ Determine the boundaries of the project process.
- ✓ Specify the output(s) of the project process.
- ✓ Identify a customer or customers other than the customer-driver.
- ✓ List other customer needs and expectations.
- ✓ Identify requirements for input into the project process.
- ✓ Determine suppliers of outputs.
- Determine the customer's measure of project process performance.
- Establish "ownership" of the project process by the customer-driven project management lead team.

#### Output

- The result of phase 1 is a clear definition of the quality issue. This must be documented. The documentation contains:
  - 1. Mission statement
  - 2. Customer-driven project lead team membership
  - Roles and responsibilities matrix
  - 4. Project process top-level diagram
  - 5. Start and finish of project process
  - 6. The project process deliverable(s)
  - 7. Customer(s)
  - 8. List of customer needs and expectations
  - 9. List of inputs for the project process
  - 10. List of suppliers of the input.

## Phase 2: Understand and Define the process

- □ Input: the input is the top level project process.
- Process: the process involves
  - Deciding critical processes to perform the top-level project process.
  - Forming or identifying additional customer-driven teams to support the customer-driven project lead team.
  - → Understanding these critical processes
  - → Defining the performance of these critical processes
- □ Output: a list of improvement opportunities.

#### Process

- The first step in this phase involves deciding which process or processes are critical. A critical process is one whose outputs have the most impact on total customer satisfaction.
- The customer-driven project teams forms or identifies additional customer-driven teams.
- The third step is gaining a through understanding of the specific impact of each process on total customer satisfaction.

- This phase involves the following:
  - ✓ Benchmarking
  - ✓ Diagramming the processes at the top and top-down levels
  - ✓ Specifying the customer or customers
  - ✓ Determining whether the process is meeting customer expectations
  - ✓ Discovering who "owns" and influences each process
  - ✓ Determining all the inputs and outputs of each process
  - ✓ Understanding the relationship between inputs of each process

- ✓ Listening the suppliers of the inputs
- ✓ Determining whether the suppliers are meeting the requirements
- ✓ Determining how to measure the process
- ✓ Measuring the process to determine how it is performing
- ✓ Understanding the value of the process to the deliverable
- ✓ Determine whether the process can be eliminated
- ✓ Listing the problems, issues, and opportunities

#### Output

- ◆ The outcome of phase2 is distinct understanding and definition of all processes, especially the critical processes, involved in the overall project.
- The process understanding and the definition documentation contains:
  - 1. Process diagrams
  - 2. Input/output analysis
  - 3. Supplier/customer analysis
  - 4. Process performance measures
  - 5. Problems, issues, and opportunities
  - 6. Process targets
  - 7. Process metrics.

## Phase 3: Select improvement opportunities

- □ Input: the list of improvement opportunities.
- □ Process: the process in phase 3 involves
  - → Specifying selection criteria
  - → Determining a selection method
  - → Making selections
- Output: the output of this process is improvement opportunities for analysis.

#### **Process**

- The criteria for selection depends on the project, but they should consider cost, resources, importance, time, effect, risk, integration with the organization's objectives, and authority.
- The documentation for the selection phase contains the following:
  - List of improvement opportunities
  - Selection criteria
  - Selection methods
  - List of improvement opportunities for further analysis

#### output

- The outcome of phase-3 is a list of improvement opportunities for further analysis.
- The documentation for the selection phase contains the following:
  - 1. List of improvement opportunities
  - 2. Selection criteria
  - 3. Selection methods
  - 4. List of improvement opportunities for further analysis

## Phase 4: Analyze the improvement opportunities

- Input: the input is the selected improvement opportunities
- Process: the process involves
  - Process analysis
  - Cause-and-effect analysis
  - Data statistical analysis
- Output: the output of this process is project(s) objectives.

#### Process

- Process analysis involves a through review of the processes from a detailed process diagram that includes cost and time elements.
- □ The steps to process analysis are:
  - → Detail diagram the selected process(es)
  - → Look for ways to eliminate non-value-added steps
  - → Eliminate or reduce high-time and high-cost steps
  - → Look for ways to simplify
  - → Remove any unnecessary loops
  - → Decrease any complexity
  - → Get rid of unnecessary paperwork
  - → Analyze frequency changes
  - → Purge or lessen waste
  - → Look for better ways to do the process.

- Cause and effect analysis involves choosing a particular symptom or problem for detailed analysis.
- Data statistical analysis involves the following:
  - Determine what data to find or collect
  - Completing the data gathering
  - Organizing the data
  - Defining the expected outcomes or goals
  - Analyzing the data
  - Specifying the specific issue(s) for action
  - Establishing priorities for action

#### Output

- The result of phase-4 is a list of project process objectives.
- The analysis process documentation includes the following:
  - 1. Detailed process diagrams
  - 2. A process analysis report
  - 3. Cause-and-effect analysis diagrams
  - 4. A data statistical analysis report
  - 5. List of project objectives for action

#### Phase 5: Take action

- □ Input: project objectives
- □ Process: the process objectives are
  - ► Alternative analysis.
  - ▶ Project concept.
  - ▶ Project definition.
  - ▶ Project production.
- Output: the output of this process is a project deliverable.

#### Process

- Alternative analysis consists of the generation, evaluation, and selection of a project alternative. Alternative generation involves the production of as many ideas as possible to accomplish the project objectives.
- The project management phase provides the following:
  - Reporting and evaluation.
  - Evaluation of project team members.
  - Clear delineation of the work accomplished and the work to be started in the next step.
  - Pricing and cost estimating.

- The concept step determines the specific approach to accomplish the project. During the concept step, all possible methods for producing the deliverable and its support are identified and evaluated against benefits, costs, and risks.
- The definition step defines the project in detail. It details the deliverable, its producibility, its integration with other systems, and its use. This step specifies the performance, cost, and schedule requirements.
- The production step involves the actual production of the project deliverable and its support elements. This is the process where the customer-driven project teams perform their tasks and report progress to the customer-driven project lead teams.

#### Output

→ The output of the production step is a project deliverable that is acceptable to the customer.

### Phase 6: Check results

- Input: the input is the project deliverable
- Process: the process in this phase involves
  - 1. Testing the project deliverable's performance against customer expectations
  - 2. Determining whether process goals are being met, and
  - 3. Taking corrective action as necessary to satisfy the customer and ensure process performance.
- Output: the output of this process is a project deliverable ready for implementation.

- During the testing of the project deliverable to meet customer expectations the deliverable is thoroughly evaluated through a complete cycle of operation, use, and/or service to determine if the deliverable should be implemented as produced or if further improvements are necessary.
- In the second step of determining the process goals, the team continues to track the performance of the project processes using the same data-collection scheme developed during the analysis phase. based on the results of the data statistical analysis, the teams persist with improvement activities to meet process performance expectations.

• The third step is taking corrective action as necessary. If the deliverable or any project processes are not meeting expectations, the team makes improvements as necessary. The team reviews information in the take action, analysis, or even as far back as the understanding and defining the process phase of the customer-driven project management improvement methodology to solve the performance problem.

#### Output

- The outcome of phase-6 is a deliverable that is ready for implementation and that satisfies the customer with project processes capable of meeting performance goals.
- The "check results" process documentation contains the following:
  - 1. Check results plan
  - 2. An assessment of the deliverable using metrics
  - An evaluation of all project processes
  - 4. A list of issues for action
  - 5. Documentation of corrective action
  - 6. A re-evaluation.

## Phase 7: Implement the improvement

- Input: the input is the project deliverable or improvement.
- Process: the process in this phase involves
  - Planning and gaining approval
  - Instituting the project deliverable and/or improvement
  - Project operation and support.
- Output: the output of this process is a project deliverable that continually satisfies the customer.

#### Process

- The first step in planning and gaining approval for the improvement involves:
  - 1) Determining a plan for implementation
  - 2) Requesting approval for the plan
- Since CDPM focuses on total customer satisfaction, implementation of the project deliverable requires that the improvement be accepted as a customer satisfier over an extended time period.
- The system implementation requires using and maintaining the system, operation and maintenance manuals, training facilities, organizational structure facilities, computer resources, transportation, and support services.

#### Output

- The outcome of this phase is a deliverable or an improvement. The documentation of this phase is the plan of action. The major topics for a plan of action include:
  - 1. The specific operation and support actions
  - 2. A list of all steps, tasks, and activities
  - 3. Assignment of responsibility for each step
  - 4. Schedule to start and finish the implementation
  - 5. Schedule for start and completion of each step
  - 6. budget

## Phase 8: Monitor results for continuous improvement

- Input: operational project deliverable or improvement
- Process: the process involves
  - 1. Evaluating project performances metrics
  - 2. Assessing the project processes
  - Seeking continuous improvement of the project deliverable and project processes
- Output: the output of this process is a successful project.

#### **Process**

- ◆ The first task in monitoring results is evaluating performance metrics.
- ◆ The second task is assessing the project processes, which involves identifying the causes of variations in a process-common or special.
- ◆ The third task of monitoring results is seeking continuous improvement. This requires cycling through the CDPM improvement methodology as many times as necessary to make perpetual improvements in the deliverable and project processes.

#### Output

- This evaluation process continues until the team is satisfied that it has improved the quality of the process in the manner intended and that these changes are permanent. The outcome of phase 8 is continuous improvement of the project deliverable and project processes. Documentation of this step involves:
- Project performance metrics
- Process performance metrics
- ✓ Issues for continuous improvement

#### Phase 8a: Closeout

- Closeout consists of:
  - 1. The closeout plan
  - 2. Divestment of resources
  - 3. Report of lessons learned
- The closeout plan outlines the specific tasks, responsibilities, and time phasing for completing the product deliverable's life cycle.
- The closeout plan should consider a final evaluation of all people participating in the project. This evaluation forms the basis for the next assignment.

#### Contd...

→ The third sub process in closeout is reporting the lessons learned. It becomes a database of information for prospective proposals and customer driven project management endeavors.