



BEST PRACTICE Quality Management Infrastructure

The reason a quality management environment is established is to assure constancy of purpose in promoting quality as a major IT goal. There are two components to that environment: belief and commitment from management and staff, and the organizational structure and quality initiatives to support that environment. This section focuses on the infrastructure and initiatives.

No organization has a perfect quality management environment. All are striving to achieve the optimum management philosophy, and organizations can be anywhere along the quality management continuum. By forming a quality function, some level of commitment and organizational structure exists that could be called quality management.

There are three approaches to quality management implementation: bottom-up, middle-out and top-down.

- **The Bottom-up Approach**

This approach sends the message that quality management is something for the employees, but not necessarily for management. This approach is like swimming against the current, and leads to frustration because resources are not readily provided to teams when required. Process improvement can be accomplished, and it can be successful, but with an inordinate expenditure of time and effort.

- **The Middle-out Approach**

Starting in the middle of the organization and then progressing simultaneously to the top and bottom of the organization can be successful. The degree of success depends on how fast the organization proceeds to the top. It presents many of the same problems as the bottom-up approach.

- **The Top-down Approach**

Top-down has the highest probability for success, although success is not guaranteed. This model fosters management involvement - the single most important requirement for quality management success. In addition to commitment, it also requires that management lead the effort, providing a quality management vision and philosophy for the organization.

Management must lead the cultural change required. Time, money, and people will be required, and the top-down approach assures the availability of the resource support that is crucial to quality management success. Quality improvement is not free; it is an investment.

In some organizations there is no choice but to begin implementation from the middle or the bottom. In these cases, demonstrated success will be required to get management's attention. While all three approaches have been used and have been successful, the top-down approach is recommended, and is used for the remainder of this discussion.

For a top-down implementation of the infrastructure in a quality management environment, begin the process with executive management. Then facilitate the downward flow of the goals, values, structure, and training established at upper levels, to succeeding levels. Each level is linked to the other by the common objective of making people capable of combined performance. Figure 2-1 shows the three levels of infrastructure normally needed.

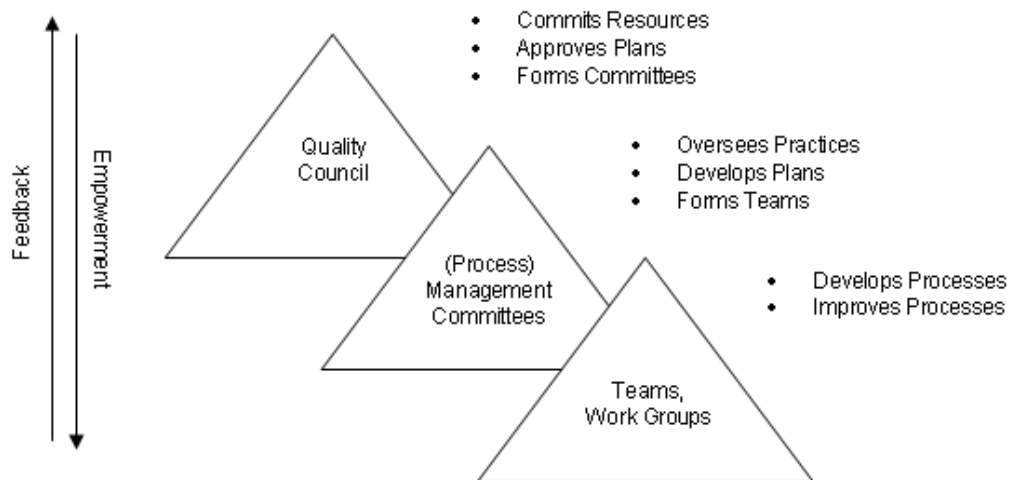


Figure 2-1. Quality Management Infrastructure

Quality Council

A Quality Council is composed of the organization's top executive and his or her direct reports. It may also be referred to as an Executive Council. The Quality Council acts as the steering group to develop the organization's mission, vision, goals, values, and quality policy. These serve as critical input to process mapping, planning, measurement, etc. Some large companies opt for more than one level of Quality Council. When multiple levels exist, each organization's



mission and vision tie into that specified by the top council. Specifically, the Quality Council:

- Initiates and personally commits to the quality management philosophies and practices.
- Incorporates this decision into the strategic planning process, allocating resources in the budget for the deployment of quality management, and ensuring resources are available for both ongoing and upcoming IT projects and internal process improvement projects.
- Establishes committees at lower levels to focus on functional and cross-functional improvement efforts, to develop or revise processes, and to oversee and manage the quality management process on a daily basis. They may develop charters to serve as job descriptions for the committees, or approve the committees' charters.
- Defines and deploys policies.
- Recommends critical processes for analysis.
- Makes the decision regarding whether to approve, reject, or table (pending further investigation) new or changed processes.
- Acts on unresolved process problems and issues referred by the committees.
- Provides review and oversight of progress.

Management Committees

Management committees (also called Process Management Committees) are composed of middle managers and/or key staff personnel, and are responsible for deploying quality management practices throughout the organization. One or more committees may be needed depending on the organization's size and functional diversity. Committees should represent all the skills and functions needed to work on the specific processes or activities. They:

- Work with the Quality Council to understand the organization's mission, goals, and priorities. They either review the charter provided by the Quality Council or develop one. They also develop and maintain a deployment plan that identifies and prioritizes which key processes need to be defined and improved.



- Develop, or commission the development of, and maintain a process inventory and process maps.
- Analyze processes, at the direction of the Quality Council, and identify those that need priority attention. This includes proposing new processes and/or revising existing processes.
- Establish teams or work groups (they may participate on the teams) to define and improve processes, and provide support to the teams (training, coaching, facilities, approaches, standards, tools, etc.). They monitor team progress and review/approve the resulting processes.

Teams and Work Groups

Teams are formed under any number of names depending on their purpose. Common names and functions are:

- **Process Development Teams** develop processes, standards, etc.
- **Process Improvement Teams** improve existing processes, standards, etc.
- **Work Groups** perform specific tasks such as JAD, inspection, or testing.

The process teams are composed of a representative group of process owners. Members of work groups will vary depending on the purpose, but suppliers and customers are likely to participate as team members or as reviewers. It may also be desirable for a QA analyst to participate on the team. Process teams use standard approaches (such as flowcharts, checklists, Pareto analysis) to define, study, and improve processes, standards, procedures, and quality control methods. They may pilot new or revised processes help deploy them to the rest of the organization, and provide process training. They may also serve as process consultants to process owners and others using the process. Approaches and tools used by the team depend on its purpose.

Guidelines for teams include the following:

- The process development committee selects teams.
- Each team should have a chairperson.
- The core team should be small, containing 3-5 people.



- Each team should have a work plan that outlines the tasks to be performed and assigns tasks to team members.
- The team should meet regularly to review work performed by individual members and to review progress.
- Different team members may draft different portions of the processes and procedures.
- The team must reach consensus before submitting results to the process management committee for approval.

References

Guide – CSQA Common Body Of Knowledge, V6.2