A Process Approach to ISO 9001:2000

Adhering to a specific process approach is essential to success

Stanley A. Marash, Ph. D., P.E.

In the October 1999 issue, I Indicated that ISO 9001:2000 "…has a new orientation built around a process approach, customer satisfaction and continual improvement." But what is meant by "process approach"?

Excellence awards, such as the Malcolm Baldrige National Quality Award, focus on a process model. Unfortunately, much of the relevant literature confuses the terms "process" and "system." Organizations seeking to update their quality management system (QMS) and registrars trying to audit their clients' QMS must be able to comprehend the difference between the two.

Consider the following hierarchy: The business process is the totality of all of the individual activities that the business performs. This process includes identifying a client/customer need, creating a product or service concept to meet the need, defining how that concept will be executed, executing (deploying) the concept, measuring the client satisfaction, and continually improving both concept and deployment.

To manage this business process, the organization develops management systems, including financial, human resources, materials, creative, deployment, quality, environmental, health and safety, and other management systems. Some of these systems will meet international standards (e.g., ISO 9001).

Each such system includes within it a number of component processes, the summation of which constitutes the specific management system. Typical processes in the QMS include leadership, planning, administration, purchasing, training, design and development, production and service, operations, measurement, audit, corrective and preventive actions, and improvement.

A business process map is a very significant tool as part of your QMS. Part of creating this map is defining where your business process starts and ends and identifying the specific activities that need to be performed, the process owners for each of the activities, and customer satisfaction measures. From this map you can begin to define which QMS related processes are involved and how you can flow chart them in detail; improve them; update the flowchart; and document, deploy, and maintain the process.

The way this differs from the method with which we address ISOO 9000:1994 resides in how your organization addressed its previous ISO 9000 registration. If you followed the documentation philosophy that states, "Just say what you do and do what you say," you'll immediately notice a significant difference between the 1994 and 2000 ISO 9000 approaches.

Paragraph 8.5.1 of ISO 9001:2000 states "…the organization shall plan and manage the processes necessary for a continual improvement of the quality management system," the key words being "processes" and "continual improvement."

Let's look at an example. Say you're the branch manager for a bank, and one of the processes you oversee is the formation and organization of the customer line. The average wait for each customer is seven minutes, but the range encompassing that average is zero to 32-minutes. After examining the customer flow more closely, you find that the 32-minute waits occur during lunch time on the payday of your two largest customers, and reducing this wait will be very difficult.

You've considered adding more tellers, but the constraints of your facility don't lend themselves to this alternative without a major capital investment. A process map has been drawn and opportunities for cycle time reduction are considered. An analysis shows that 70 percent of the checks cashed on payday are for one of six specific amounts. By preparing a number of envelopes for each of those six amounts, 70 percent of the checks can be cashed in 15-20 seconds vs. 1.5-2 minutes, reducing the cycle time by 88 percent or reducing the 32-minute wait to 3.7 minutes.

There are many different types of service-oriented processes generally referred to as transactional processes. Those of you who are involved in manufacturing operations already recognize processes such as wave soldering, plating, welding, and nondestructive testing. It's the total of the processes we find in transactions, research and development, and manufacturing that we must focus on as well as the overall business process and the management system.

In the next few articles in this series, which will be published every other month, I will address various aspects and effects of the process approach, customer satisfaction, and continual improvement as the significant issues that differentiate ISO 90001:2000 from the 1994 version.

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