

## PERFORMANCE IMPROVEMENT THROUGH MANAGEMENT AUDITS

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### ABSTRACT

We should go back to the basics of what a quality assurance program is designed to accomplish and then use that program to provide confidence to the public that actions are correct. The quality assurance management audit, if done responsibly with trained people, is the best tool we have to monitor the goal of conducting business safely and correctly. Audit reports should be used to project future performance and should not be used as a forum for recommendations. They should be presented in such a manner as to allow the managers involved to continually improve the work activity.

#### WHY AUDIT?

Quality Assurance, whether for research, construction, health care, manufacturing, power plant operations, government, or selling computers, consists of three basic parts:

- Plan what you want to do
- Do what you plan
- Measure for improvement

Sometimes, an organization may become so involved with the first two items that the third is forgotten. However, experience has shown that effective monitoring will overcome deficiencies in any job activity and improve its quality greatly.

The first reason for auditing is for survival. In any competitive situation, business will go to the more efficient provider. If you do not know how well (or poorly) your organization is performing, someone will take your business away. Federal, State, and City government agencies are also affected, in that programs funded can also be dropped. Quality has become the key to survival in our competitive world environment. To have only two-thirds of a program to enhance that quality is short-changing both providers and receivers of a product or service.

Another reason for conducting audits lies in the Code of Federal Regulations. In order to get and keep a license to operate and maintain a nuclear waste facility, the parties involved must develop and implement a rigorous program of external and internal audits as specified by Appendix B to 10CFR50. Even in this prelicensing phase of nuclear waste repository research, auditing performed by the Department of Energy and its contractors must be acceptable to the Nuclear Regulatory Commission in order to "receive credit" in future licensing situations. However, just because the NRC approves an audit program does not mean it will work. Many of the nuclear utilities with massive "quality" problems had audit programs which were approved by the NRC.

The final reason to conduct meaningful quality management audits is to counter the many outsiders opposed to what you may be doing. For one reason or another, powerful organizations you have no control over are continually looking for the errors and mistakes when they are small and relatively easy to correct. If you can show the outsiders that you have an effective program, they will be more inclined to leave you alone. If you never broadcast the fact that you care enough to implement a monitoring system,

the outsiders will assume your obligation, oftentimes in ways that could be very damaging to your mission.

#### WHAT IS AN AUDIT?

The conformance measuring concept goes by a variety of names, among them:

Review  
Audit  
Appraisal  
Assessment  
Surveillance  
Monitoring

Now, some may choose to be quite specific and picky as to the difference in meanings between these terms. Fine. But within the context of this presentation, they all mean the same thing: "A structured means of measuring the conformance of actions to promises." As many in the quality and management fields have shown, unless one can measure a process, it becomes very difficult to change that process for the better. (The term "process" here is not limited to the traditional manufacturing definition. It means any structured means of accomplishing an objective.) An important difference in this definition for audit lies in the term "promises." Organizations make such promises every day. Examples include:

Promises to employees--in the form of Company Policies,  
Promises to Officers and Directors--in the form of Company Procedures,  
Promises to the Regulators--in the form of Licenses,  
Promises to Customers--in the form of Contracts and Purchase Orders,  
Promises to the Public--in the form of "Impact" Statements

If any of these promises are not kept, the organization has lost credibility and the very success of the company or mission may be in jeopardy.

#### FORWARD LOOK

Regardless of which of the above terms is used, the audit process must measure performance with set standards (promises). Historically, this measurement was done by an independent agency as a review and evaluation of past practices. The results were presented to some other group, like investors or regulators, for their use and action. Two key changes to this accounting approach are suggested.

In order to be useful to those who wanted the audit in the first place, audits must be performed and presented in a meaningful fashion. Instead of examining past conformance to requirements and regulations in minute detail, the reviewers should use current performance to project future actions. It is better to avoid dwelling on the sins of the past; they can't be changed anyway. Instead, use these past practices to project future performance. Presented in this manner, affected managers can do something to change anticipated deficiencies. They resume the traditional management role of directing work to be performed.

Another way to make audits more meaningful is to always include an "executive summary" in the report, no matter how large or small the audit. Managers (the "customers" for an auditor) need to know how well the program is working in their area of interest. Things like "findings" and "deficiencies" mean little unless placed in the context of product quality. How is the lack of promised training affecting report quality? Is the lack of manufacturing drawing control resulting in more parts being scrapped? Issues like these will get management attention and all parties (auditors, audited, suppliers, and customers) will benefit.

#### THE AUDIT TEAM

One-person audits are an invitation to trouble. In order to prevent the audit from becoming a narrow interpretation of existing standards or methods, the team should have at least two individuals. Although this may seem to be more expensive and time-consuming, such actions to encourage a balanced approach will cost less in the long run. On the other hand, any team with more than six members becomes a mob. If the audit requires so many people, then perhaps the scope is too broad.

If at all possible, someone from outside of the "QA" organization should be on the audit team to further this concept of balance. Even though it is common for the team leader to be a member of the Quality group, audit team members are drawn from all departments within an organization. Staff members from an interfacing discipline make ideal team members, as they often see "QA" from a different perspective and subsequently become champions for the quality assurance program.

In order for the audit to be effective and successful (i.e. improve performance), the audit team members must be trained. A common mistake is for a new employee in the Quality group to be designated as the Company Cop, under the premise that one can learn the company culture by monitoring it. Wrong! This approach violates several sound management principles. It allows a neophyte to cause untold disruptions and errors through the audit process, and it further antagonizes the line folks against the Quality organization. Those auditing must be knowledgeable of the process to be audited. ("Experts" can be worse than an untrained individual though, if they are allowed to impose their preconceived methods on everyone else.) The auditors must also be trained in audit methods, including interview techniques. Auditors should be humanists rather than technologists; after all, human control systems are being examined, not a bunch of printed circuit boards. And finally, auditors must be able to practice their skills as often as possible under the direction of an experienced team leader.

#### NO RECOMMENDATIONS

Situations are often encountered where the quality assurance staff give direction to other groups.

Often, this direction is disguised as a "recommendation." These are seen in many places; perhaps the most common occurrence is in the audit report. Still another place for these recommendations is the non-conformance or deficiency report. They are all basically saying, "Here's a problem and here's how to fix it." When these are received by a supplier, the implied message is that the action must be done or there will be no further business. Regardless of whether it is called a recommendation or not, others resent it and more often than not, it won't work anyway.

When the QA group starts to provide solutions to another organization's management control problems, the inevitable result is a decrease in the quality of the product or service. There are several reasons for this:

- Malicious Compliance - The receiving organization often does not know what is really meant in a "suggestion" and may be angry at the auditors for making it in the first place. So they do an obviously stupid thing just to show how far off base the suggestion is. Remember, the quickest way to get a boss in trouble is to do exactly what he or she says. Then one can always say, "I did just what you told me to do."
- Inadequate Knowledge - Problems, by their very nature, are often difficult to solve. At times, they may require an extensive analysis or an in-depth investigation. In the limited time for an audit, the team cannot always devote the resources necessary to come up with the true underlying cause(s) to a difficult problem, so the "solution" is inadequate.
- Perceived Bias - Auditors may be tempted to suggest or recommend a solution based upon prior experience in a similar situation. But because the solution was "not invented here" it becomes suspect. This is a natural human tendency that should be recognized.
- Ownership of Quality - If the auditors allow themselves to recommend, suggest, or direct the necessary corrective action, then they have assumed at least partial ownership of a problem, with little or no resources to correct it. This is not an ideal position to be in. They have become a crutch for the management of the organization on the receiving end of the recommendation. Ownership of the quality of the product or service is no longer clearly defined; the auditors have taken some of that ownership away. When ownership is removed, so is responsibility and accountability.

This concept of the ownership of quality is most important to success. Managers are paid good money to provide quality products and services and must be held accountable for the results.

#### CONCLUSIONS

The job of quality professionals is to provide processed information to the "line" managers, those producing the product or service or those directing the government mission. Auditors are not getting paid to solve management problems and most really don't know how to anyway. Quality professionals should do all they can to find and analyze the true impediments to quality. Line managers, likewise, need to use their QA resources more effectively. Well planned and executed audits will provide management with valuable data and highlight priority areas.