Use Project Audits to Improve Performance

Most of us react with apprehension when we learn that our work is going to be audited. Our concern is understandable—a third party is going to review our work, progress, and adherence to processes, procedures, and contracts based on the benefit of 20-20 hindsight. While it is unlikely that project audits will become stress-free events, the following eight steps will ease the process and improve project performance.

1. **Incorporate audits into the project quality management plan.** American engineer Walter A. Shewart advocated continuous improvement based on an iterative cycle—now known as the Shewart Cycle—of planning the work, doing the work, checking the work, and taking action to improve the work based on information gained during the checking process. An audit is a planned and structured approach to checking the work based on a selected combination of project process, progress, or performance. Implemented properly, audits provide insights that support project quality objectives and should be driven by and supported by project managers.

2. **Establish the purpose and scope of the audit.** Audits can be used to evaluate compliance with contract requirements, adherence to policies and procedures, conformance with project delivery processes, or technical adequacy of the work product. Some projects may require a comprehensive audit that encompasses all areas. Environment, health, and safety (EH&S) managers who perform the same type of project work will find that auditing different elements on multiple projects will provide greater insights about project execution and delivery than comprehensive audits on a few projects.

3. **Select a qualified auditor or team.** Although we may not be able to pick and choose an individual auditor or audit team member, we do have responsibility to project stakeholders to ensure that the audit team is competent, objective, and understands the purpose and scope of the audit. Auditors should understand the project scope, the project management systems, and the technical aspects of the project if they are to provide information that drives continual improvement objectives.

   In short, auditors should be peers, people with the background and skills that would otherwise enable them to function as competent project team members. Importantly, they should share the goal of contributing to continual project improvement; however, auditors are not the project managers and while they may have preferences and opinions about how projects should be managed, auditors are expected to evaluate and report conformance issues in light of objective evidence.
Plan the audit. An audit is a sampling exercise; however, it is not a random sampling exercise. The audit team will perform significant review work in advance of the audit. Depending on the scope of the audit, advance review work will focus on contracts, procurements, project plans, standard operating procedures, policies, work instructions, and personnel assignments. Based on the review, the audit team will develop checklists and determine which documents and records should be reviewed, who should be interviewed, and which operations should be observed. The auditor (or lead auditor, in the case of an audit team) should submit this information in advance to the project manager.

During the planning process, it is also important to decide how audit results will be reported. Nonconformances can be reported without qualification. Alternately, they can be reported based on severity, enabling the project manager to prioritize corrective actions. In some cases, the audit team may report “observations” or “opportunities for improvement” to signify borderline conformance issues.

Define the audit approach. Project audits can be conducted by evaluating project elements, functions, or processes. The approach will be determined by the audit purpose and scope.

An element audit focuses on the requirements of a specific project element such as personnel training requirements for a certain activity. In this case, the auditor would identify individuals performing the task and evaluate conformance with training requirements by reviewing training records.

A function audit focuses on the requirements of a specific task or operation such as a sample collection procedure. In this case, the auditor would review the standard operating procedure for the sampling operation and then evaluate conformance with the procedures by interviewing and observing the work of individuals responsible for performing the task.

A process audit focuses on the entire process and would likely include element and function auditing techniques. For example, the auditor might review a test report and then working backwards, evaluate the various operations and requirements that were necessary to produce the work product.

Conduct the audit as agreed. An audit is intended and designed to satisfy project management objectives. Once the audit is underway, it may be necessary to request additional documents or interviews beyond those identified in the audit plan and schedule; however, the auditor cannot simply change the focus or approach based on preferences or the absence of nonconformances. Similarly, the project manager or project team members are responsible for supporting the audit plan throughout the process.

Continually review audit progress and results. The audit team and project manager should regularly review audit progress and findings during the audit process. Ongoing reviews provide the opportunity for clarification of issues; potentially allowing their resolution while the audit is in process. There should be nothing in the final audit report that comes as a surprise.

Act on audit results. Once the project manager is aware of nonconformances, s/he can begin to work with the project management team to work on corrective actions based on a root cause analysis. To maintain the integrity of the “Plan-Do-Check-Act Cycle,” the corrective action plan must include steps, including repeat audits if necessary, to monitor implementation and effectiveness of corrective actions.

The Goal Is Improvement
Project audits, whether driven by project manager choice and design, contract requirements, or company policy, are an important project management task and project manager responsibility. When we recognize this responsibility and take the lead for project audits, we’ll find they proceed smoothly and provide information that improves project performance.