



PROVIDES REALISTIC OPPORTUNITIES FOR INCREASED TOTAL SALES

February 24, 2003

SIX ACTIONS FOR BETTER TIME ESTIMATES

By Ann M. Butera, CRP, the President of The Whole Person Project, Inc.

In a perfect world, there would be no deadlines. Everyone would have as much time as they needed to complete their audit assignments. The number of audits performed during a year would never ever be used by anyone as an indicator of productivity. Audit clients would be happy to have you stay with them forever, creating space in their departments for you to spaciously house all your gear. You would have your own office complete with a small table for meetings with audit clients, so you wouldn't have to scramble trying to find meeting space. All right, so it is not a perfect world and deadlines are ubiquitous, incredibly tight and unceasingly urgent. The reality is that there never seems to be enough time to complete any projects, and sometimes an audit's scope seems too enormous to fit into the time allotted.

THE IMPORTANCE OF ESTIMATING

Estimating, a part of planning, is the process of determining and allocating time to various activities. During an audit, the in-charge is responsible for developing the audit objective and the audit program. A critical component of this plan is estimating the time required to perform each step. Estimates enable auditors to mentally rehearse how the time allocated for the audit will be used. During the preparation of the annual audit plan, audit management develops estimates of how much time will be spent reviewing each auditable entity.

If you work in a mid-sized or small audit department, you may not be submitting an annual audit plan with time estimates concerning how time will be spent on each audit. Your audit committee may not currently ask for this information or hold your audit department accountable for achieving the plan within budget. Annual audit plans with resource estimates are typically produced in larger audit departments and reported to the audit committees. My prediction is that as the impact of the Sarbanes-Oxley Act is experienced, more audit committees will require annual audit work plans, complete with estimates. And this will ultimately create pressure on lead auditors to submit time estimates with their audit programs.

Even if your organization does not require performance time estimates, the ability to develop realistic time estimates is vital to auditors at every level. Estimating is a distinct and fundamental part of planning, something every auditor needs to do. As a simple example, consider what happens when you need to schedule a meeting. The first question people ask is, "What do you want to meet about?" Once this is known, the second question is, "How long do you think we'll need to talk about it?" One needs estimating skills to answer the second question. If you underestimate the time needed for the meeting, good luck trying to pull everyone together again for a second session, especially if the meeting was intended to be a closing conference at an out-of-town audit client's site.

If you are in an in-charge capacity, estimating becomes even more critical. You have resources to manage. Without decent estimates and an ability to track progress against them, your audit efforts can easily disintegrate into wasted time, as auditors get bogged down in various aspects of the audit. Without decent

estimates, you will be trying to lead an audit without any guideposts and this will significantly inhibit your ability to prioritize the audit's activities and deliver results.

The ability to estimate resource requirements becomes more critical when one performs risk-based process audits. These audit programs are dynamic and the initial objectives are typically very broad. The general objective of these audits is to evaluate how effectively the controls are functioning to enable the business or process to achieve its objective. From the onset of a risk-based audit, the auditor must display superior planning and estimating skills or risk working on the never-ending audit.

Assuming that the audit or project is well planned, i.e., all key activities are identified, reliable estimates make it easier to complete audits and projects on time and within budget. The ability to estimate also makes it easier to make performance promises one can keep with minimal stress. Reliable estimates also make it easier to set and manage client expectations concerning how long the audit will take, as well as how much time you need from them and when you will need it. Effective estimating reduces the chance that your client will be on vacation the day you have scheduled the exit conference.

WHY ESTIMATING IS A PROBLEM

The first problem is that estimating is misunderstood. Estimating is *not* the same thing as planning, although the two functions are related. Planning is the ability to think through, anticipate, and prioritize the things that need to get done. Estimating is the ability to figure out how long each activity should take. One can be a good estimator but a poor planner. For example, an auditor can prepare an agenda for an opening conference without realizing some critical discussion topics are omitted. Based on this agenda, the auditor accurately estimates two hours are required for the opening meeting. The meeting proceeds as planned, the two hour time block is used, and only afterwards does the auditor realize that s/he needs information that should have been discussed at the opening conference.

Another problem with estimates is that they create expectations that the time allocations will be exact. This thinking defeats the whole purpose of estimating. Estimates by intent are approximations. Using an estimate, you should complete a task or project within plus or minus the time allocated. The objective in estimating is to be under- or over- within a reasonable margin. Therefore, the goal with estimates is to be wrong by the same degree ahead or behind schedule. Now, once you are involved in repetitive projects or audits, this goal changes and the estimates are expected to be more precise.

Estimating is also a problem because it takes time to come up with the timelines and time to track results against them. However, tracking time usage is an invaluable source of historic data that can be used to produce better estimates in the future. I have several clients who have installed various methods to track time usage. At each client site, getting people to comply with the time tracking process (no matter how automated it is) is a perennial challenge. For some auditors, recording time usage is a waste of time. They reason that it takes half as long to track the time as it does to do the work and therefore question the value of this record keeping. I am not sympathetic because I live in a world of fixed fee, closed ended projects. If my estimates are off, the work still needs to get done without any additional compensation.

Fundamentally, estimating is problematic because it requires predictions about the future, something no one can do with precision. In auditing, there are several variables that affect an estimate's accuracy:

- ✚ The nature and availability of information concerning the area or process to be audited, including the business or process complexity – To what degree is information available electronically and can be analyzed using computer assisted auditing tools (CAAT)? Typically, access to electronic data requires less time. Additionally, the ability to reuse CAAT queries saves time and increases the size of the test

population, generating audit efficiency. If assumptions made concerning electronic data availability turn out to be wrong, additional time may be required to complete the audit. Single purpose applications or entities require less time to understand and analyze, regardless of the auditor's experience and the electronic access to information.

- ✚ The speed with which audit clients (or other organizations external to internal audit) provide requested information – Progress can be significantly delayed pending receipt of information from third parties. If clients are known to be slow responders, estimates should be adjusted accordingly.
- ✚ The auditor's familiarity with the business or process under review – Subject matter experts should require less time than tyros to understand and analyze the business information. One cautionary note: the less one knows about an area, the more likely the time estimates will be unreliable or best guesses.
- ✚ The auditor's experience in auditing – If the auditor is still learning how to use the automated workpapers or struggles with evaluating controls and constructing effective audit tests, the audit project will require more time to complete.
- ✚ The availability of audit resources – If the estimates were created with the assumption that two auditors would be assigned and only one is available, the total calendar time required to complete the audit will increase.
- ✚ The audit objectives and the audit program steps – Whenever audit objectives and scope are broad, estimating becomes more difficult. This difficulty is compounded whenever the audit program steps are also stated broadly.

ACTIONS TO TAKE FOR BETTER ESTIMATES

1. Set the audit objective with care. Although it is fine to issue audit clients an Engagement Memo with a broad set of objectives and scope, using only this information to estimate the time required to complete the audit is not a good idea. Setting more explicit audit objectives that expressly define the high risk areas and delimit the low risk or recently reviewed functions, is a more productive approach, one that can be accomplished by using a risk-based audit methodology. Once the end zone is clearly defined, it is easier to set time and resource estimates.
2. Identify the major activities. The more detailed the plan, the easier it is to develop realistic estimates. Once the audit objectives and scope are detailed, then plan backwards to identify the major tasks that need to be performed and populate your audit program. To do this, ask yourself, "When this project is finished, what are the last things I will have to accomplish." Record your responses on the sheet of paper. Then ask yourself, "In order to complete these things, what was the second-to-last thing that I would have to accomplish?" Record your responses to this question. Continue this process until you have identified all the steps you will need to perform during the project. Working backwards to complete an audit, we would issue the final report, create the final report by incorporating the clients' comments, convene client meetings, if needed, to resolve to problematic corrective action plans, issue the draft report, edit the report, draft the report, analyze the test results across audit segments, etc. Once all the activities are described, it is relatively easy to come up with the time estimates for each one.
3. Highlight the critical dependencies. In many cases, estimates concerning the completion of some tasks rely on the prior completion of other tasks. For example, writing the audit report is a task that is dependent on completing and analyzing test results. If the test results are not analyzed, the report cannot be written and the time required to write the audit report will be longer than estimated. Highlighting the critical

dependencies enables you to more easily spot the high risk, “make it or break it” points in your project’s estimates.

4. Document your assumptions. If your estimate includes having two auditors, make sure this is clearly expressed in your audit planning documentation and audit project plan. Writing the assumptions down prevents selective memory lapses from occurring later when that resource may not be available when you need it and the time required to complete the audit is extended.
5. Determine the required time for each of the major activities. Since every plan needs revisions – this is a fact of life – your life will be immeasurably easier if you document the logic you used to come up with your estimates. As you make your time determinations, I suggest that you estimate in either half or whole day increments. Admittedly, the “fudge” factor allowance (technically known as *float* or *slack*) is larger by using whole day increments. If each of your audit projects is unique, creating a higher likelihood of unforeseen problems, using whole day increments is a more conservative approach. If your audits are repetitive projects, using half-day increments would be more effective. Since the goal is to create realistic estimates, you might want to use the following formula, particularly if you tend to underestimate time allocations:

The shortest time required + 4 times the likely time required + the longest time required

6

6. Track and use historic records to understand how much time certain activities required in the past. Estimating experience is a good thing --- but only if you have a written record. Memories are too unreliable to trust. Get more disciplined about recording time usage, especially for the major audit assignments. If you know that certain compliance audits will need to be repeated cyclically, historic information is a wonderful source of estimating information. Using historic information will give you a better sense of how much time to allocate to the various audit phases, e.g., planning and risk analysis, detailed control evaluation and testing, test analysis, and report issuance. Historic time usage is only valuable if the data is accurate. Get into the habit of recording data as the tasks are completed.

One final thought: Specialized project management software won’t make you a better estimator, although it will generate pretty graphs and charts quicker. But these pictures won’t help if your approach to estimating is unsound. Focus on producing better estimates. Estimating is a skill. Like any other skill, it gets better with practice. Let me know how you fare as you practice using these techniques.

Ann M. Butera is President of The Whole Person Project, Inc., an organizational development consulting firm, which specializes in developing audit methodologies and teaching ways to audit for greater results. She serves on an audit committee for a financial services firm. When she is not working with internal auditors, she can be found assisting managers in control self-assessments and Enterprise Risk Management initiatives. If you have specific questions or comments, please call Ann Butera at The Whole Person Project, Inc. (516) 354-3551 or e-mail her at AnnButera@cs.com.