

Automation is Key to Improving Efficiency and Effectiveness of Audits

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Many firms are trying to figure out how to increase the efficiency and effectiveness of their audits. Economic uncertainty and increasing fee resistance from clients is putting additional pressure on firms to manage the efficiency of their audits. Market pressures and economic uncertainty are also increasing the risk of fraud as companies seek to show strong financial performance.

To help firms that are interested in increasing the efficiency and effectiveness of their audits, we interviewed a variety of firms, both large and small, that were both successful and unsuccessful in utilizing technology to automate their audit processes. Our goal was to identify the strategies and factors that helped or hindered successful deployment of technology to support key audit processes. We also looked at firms that had broad adoption (i.e. used automated tools on all their engagements) and those that used tools inconsistently (for example, only using electronic confirmations when the receiving party requires it).

FIRMS OF ALL SIZES SEE BENEFITS

An interesting finding from the research was that neither the size of firm nor the level of technology adoption (e.g. bleeding edge vs. laggard) were factors in the successful implementation of audit automation tools. Firms of all sizes and at varying levels of technology adoption have been able to realize the value of audit automation tools.

TRADITIONAL VS. PROGRESSIVE FIRMS

Our research showed that firms that were perceived as leaders in their area had certain characteristics and ways in which they approached the use and management of technology in their firms. These elements that help a firm move from “ordinary” to “excellent” are identified in the table below. Examples of how a more traditional firm evidences these elements are provided in the “Traditional CPAs, Inc.” column. Elements of leading firms are described in the “Progressive CPAs LLC” column.

| EXCELLENCE ELEMENT | TRADITIONAL CPAS, INC. | PROGRESSIVE CPAS LLC |
|---|--|--|
| IT Steering Committee | IT Steering Committee is focused on firm infrastructure (e.g. e-mail, office servers, MS Office, practice management) and upgrades to existing software. | IT Steering Committee also focused on firm infrastructure, but also looks at keeping the firm tapped into emerging technologies, and how to increase staff efficiencies and client collaboration using those technologies. Larger firms may have additional sub-committees for each line of business, focused on the applications and services used specific to the line of business. Reports up to IT Steering Committee and to Line of Business leadership. |
| Audit Workflow Management | Low level of audit workflow standardization across the firm. Audit workflow varies depending on the partner/manager in charge of the audit. Audit workflow is not monitored, or monitored on an ad-hoc basis by each partner/manager. | Audit workflow is standardized across the firm (with limited localization allowed for larger firms with regional offices). Automated tools are deployed to help manage and track workflow, including time from completion of fieldwork to delivery of audit report. |
| Staff Performance & Audit Cost Management | Staff performance is measured by “billable-hour” and engagements by performance against budget. Treats staff as fixed cost and doesn’t analyze opportunity cost of staff assignments. | Uses other measures (e.g. meeting of delivery targets, client satisfaction) in addition to “billable-hour” to measure staff performance. Looks at both revenue potential and cost basis aspects of staff. Seeks to push work down to lower level staff when possible to reduce cost, and provide opportunity for more senior staff to generate additional revenue. |
| Audit Technology Usage & Training | Audit technologies made available to staff, but usage not mandated. Usage usually dictated by engagement partner/manager preference. Training not standardized and usually on-the-job provided by other staff or managers as needed. | All existing staff provided with training during new tool rollout. New staff provided with training on firm’s audit technologies during on-boarding. Usage mandated by policy with exceptions allowed only under select circumstances. |

REAL LIFE EXAMPLE: AUTOMATING AUDIT CONFIRMATIONS

Part of our research included understanding the approach that firms used in automating their audit confirmations. Manual confirmations are estimated to cost as much as \$70 per confirmation, a figure that can vary depending on staff bill rates and the amount of follow-up work needed to address lost or inaccurate confirmations.¹

Manual confirmations are also at risk for confirmation fraud because a client can:

1. Provide false contact address/contact information;
2. Provide false or incorrect contact person; or
3. Influence the confirmation process by providing misleading or false information.

Many of these frauds are successful because it is often impractical for auditors to validate the legitimacy of the signatures and authority of the person returning the confirmation request.²

As noted above, firm size and perspective on technology adoption were not consistent predictors of a firm's success in rolling out electronic confirmations. It really is the application of the "progressive" excellence elements that helped to ensure that the firm realized value from automating its audit confirmations.

Shown in the table below are the questions and concerns we saw raised by traditional firms and the responses or perspectives we saw adopted by the progressive firms.

| TRADITIONAL QUESTIONS/CONCERNS | PROGRESSIVE RESPONSES/PERSPECTIVES |
|--|--|
| Audit Workflow Management: What if we just say that whatever teams want to use the tool can, and those that don't, can continue to do it manually? | <ul style="list-style-type: none"> • While this approach is possible, it won't allow us to really gain the full benefit of the automation. • A fragmented approach may also cause confusion among the audit teams since different procedures would be used for the same task on different engagements. |
| Audit Cost Management and Audit Technology Training: Can audit confirmations work really be pushed down to an admin staff? | <ul style="list-style-type: none"> • Because audit confirmations are primarily administrative anyway (mail merge, stuff in envelopes, mail out, receive back, open responses, document results), yes, the work could be pushed down to an admin staff. Final analysis and conclusions would still be done by professional staff, but at least the administrative work could be done by lower cost staff. • By standardizing and centralizing this process, we should also gain processing efficiencies since it would be the same person servicing many of the engagements. There is less turnover with the admin staff, so we won't have to spend as much time training them, as we currently have to do every time we hire new audit professional staff. • Both of the above, should reduce the internal cost of audit engagements, thereby increasing their profitability. |
| Audit Technology Usage: Are electronic confirmations really secure? Isn't it in "the cloud" and that thing isn't secure is it? | <ul style="list-style-type: none"> • As long as you can get a Service Organization Control (SOC) 2 report from the vendor that addresses the Security, Confidentiality, and Privacy aspects of the Trust Principles, then you can rest assured that your data (and your clients' data) is safe. |
| Audit Technology Usage & Training: Isn't this tool a "techie" thing? Can our staff really learn to use it? More so can our admin staff really learn to use it? | <ul style="list-style-type: none"> • The functionality of the tool mirrors the manual confirmations process. So as long as the person using it understands how that works, they don't need to be a "techie" to use the tool. • In our proof-of-concept, the staff found it pretty easy to learn and they were able to use it on additional engagements with ease. It wouldn't take us a lot of time to develop some simple training materials by taking screen shots and putting some explanations down in a document. |

KEYS TO EXCELLENCE: AUDIT AUTOMATION

Based on our conversations with a sampling of large, medium, and small firms, we identified the following eight keys that should help guide firms as they strive to improve the efficiency and effectiveness of their audits. When applied to a firm's audit automation initiatives these keys will help to reduce the risk of the initiatives and increase the firm's ability to realize the potential value in deploying audit automation tools.



Key #1: Appoint an Audit Excellence Officer (AEO)

A “shotgun” or “field of dreams” approach will produce inconsistent results—don’t just purchase tools and leave it up to the staff to use it. As with any other system rollout, automating your audit processes requires a focused and structured effort. To ensure success, assign one person to be your Audit Excellence Officer (AEO) to spearhead the effort. This person is responsible for ensuring that the tools are rolled out properly, timelines are adhered to, and that an appropriate level of involvement was maintained firm-wide. If a tool is ending up not being a fit for your firm, then this person would be the one to validate the reasons for non-adoption, formally cancel the rollout, and ensure proper close out of the tool’s data/reports.

The AEO should be someone high enough in the firm that they will have a good perspective of how the tool would be used and how the tool may impact the diversity of clients that the firm services. It should also be someone that has enough clout with the audit teams that their help will be welcome and not distained. The AEO should also be someone who has enough bandwidth to help educate and support tool users, especially in the proof-of-concept and early adoption phases.

If not a partner, then the AEO should have access to a partner that will provide the executive level support for automating audit processes. Either the AEO or the partner should communicate results and progress to the other audit practice leaders. It is important that the staff clearly see that the projects led by the AEO has the support of the firm’s management. This will aid with buy-in regarding use of the tools, and ensure that your staff perceives this as a firm initiative, rather than someone’s pet project.

Key #2: Understanding Your Audit Process is Critical

If you take a broken process and automate it, you’ll just have a more efficient broken process. Before beginning any major process automation initiative you need to have a good understanding of the process(es) that you’re trying to improve. Take the time to map out your audit process—much as you would map out the business processes for the various transaction cycles of an audit client. However, instead of focusing on identifying control points, focus on defining the key tasks and workflows that are necessary to manage and execute your audit processes.

Be sure to also identify the person or “actor” (e.g. staff, senior, manager, partner, admin) that is responsible for performing each task. Some tools may allow you to shift the responsibility for performing a task to a different person, so it is important to note who the current actor for the task is and who the actor may change to when the process is automated. For example, with electronic confirmations, several firms were able to shift responsibility for processing confirmations to a member of the administrative staff rather than having the professional staff perform the process. This reduced both the cost of performing the confirms, as well as freeing up the professional staff to focus on more of the analysis work, or to take on additional engagements to generate more revenue.

Lastly, be sure to also understand the flow of the tasks and their interdependences. This will help you to identify critical paths in your audit processes. Insight into these critical paths is essential if you are trying to reduce the overall cycle time for an audit (i.e. the elapsed time from the start of the audit to issuance of the report and close out of the engagement).

Remember too that process improvement benefits can come in two primary forms: (1) efficiency gains and (2) effectiveness gains. For an audit, efficiency gains equate to the ability to perform the same audit with less direct staff effort, and in the grander scheme, that we're doing a better job of managing our staff resources to perform the audits. Audit effectiveness gains on the other hand mean that we've lowered our overall audit risk—usually by performing more comprehensive testing that provides us with a higher level of assurance. Audit automation initiatives can be focused on one or both of these benefits.

Key #3: Adopt Incrementally to Ensure Long-term Success

Consider using a phased/incremental approach to help mitigate the impacts of the change to your staff (and firm budget). With this approach, a full rollout is divided into logical phases or “smaller chunks”. This allows a firm to identify and correct issues before a firm-wide rollout, reducing the risk of a large implementation failure. Depending on the process being automated, logical phases may be:

- **Type of engagements:** audits, compilations, reviews, agreed-upon procedures, etc. By making the use of tools mandatory by type of engagement, policies for mandatory adoption can be clearly defined and confusion among staff as to what they should be doing using which tool is reduced.
- **Complexity of engagements:** use it on less complex engagements first so that staff can focus on learning to use the tool rather than performing the work. Conversely, some firms may choose to roll out a tool to more complex engagements first because the benefit to the more complex engagement may be greater than in a less complex one. Use of data extraction and automated sampling and testing tools are a good example where larger engagements may gain more efficiencies and effectiveness before smaller ones.
- **Phase of the engagement:** client acceptance, planning, controls testing, substantive testing, etc. If a tool supports particular phases differently, consider rolling out the functionality associated with each phase separately.
- **Engagement staffing:** for example, rolling it out to more tech-savvy staff first, so that they can become familiar with the tools and then help out with adoption by the rest of the staff. Or if this is a tool that is used differently by different levels of staff, roll it out to each level of staff at different times. In a larger firm, this may also be an office by office rollout.
- **Tool functionality:** just because a tool provides a variety of functions doesn't mean that all the functionality has to be rolled out at the same time. Consider providing training in one functional area or module first, then rolling out additional functions/modules as the staff gets comfortable with the previous one.

There is no “right” answer on how to best divide a rollout. Each firm has different factors to consider in its engagements, staffing, and technology infrastructure in making this decision. Remember that the main objective is to identify smaller “chunks” of the project, where scope and impact of change can be better controlled and risk better managed to increase the probability of success of the rollout over time.

The incremental approach may sometimes not be feasible, especially if the automation is going to be provided by an upgrade to a tool that the firm is already using or if it impacts a process that must be standardized firm-wide to be effective. Sometimes the benefits of the tool are also only gained when a tool is used across a broader base of engagements, so an incremental approach may not provide the immediate gains that the firm expects. Whatever the case may be, the AEO will need to determine whether there is value in an incremental rollout or whether a one-time rollout is more appropriate. If it is decided to do a one-time rollout, be sure to include additional change management and quality assurance controls over the project to sufficiently reduce the risk of an unacceptable rollout.

Key #4: Use a Proof-of-Concept to Build Your Business Case

When possible, use a proof-of-concept—a small controlled “test drive” with a sampling of the firm’s clients/engagements using a particular tool. Some people also call this a “pilot” or “beta test” project. The objective of the proof-of-concept is to gather lessons learned and determine how best to use the tool before rolling it out to the entire firm. Since usage procedures and process changes can be identified and tested with a smaller group, this will help to minimize the disruption that a tool may cause, and also ensure a smoother adoption when rolled out to the entire firm.

Using a proof-of-concept approach provides several benefits. It will allow those participating in the proof-of-concept to:

1. **Become familiar with the use of the tool before having to use it on a lot of engagements.** Every firm has different staff with different levels of technology competency. This can help to identify what training will be necessary when the tool is rolled out on a broader scale.
2. **Determine what changes will need to be made to audit procedures and timing.** This will allow the firm to determine the best way to incorporate the tool into its audit procedures. If necessary, procedural documentation or audit methodology can also be updated to include the use of the tool.
3. **Quantify the benefits of the tool.** Many firms don't have a feel for their true cost of their manual processes. Have teams track the actual time it takes them to perform the manual process for a sampling of engagements. Proof-of-concept teams should also track the actual time spent performing the same process using the tool. These two metrics can be compared to estimate the benefit that could be realized by automating the process.
4. **Quantify the total cost of automating the process.** By identifying all of the changes and training that will be needed at the firm-level, an estimate can be prepared to identify both the direct (e.g. user licenses or per-transaction fees) and indirect (e.g. training, internal procedure changes, etc.) costs of automating the process.
5. **Determine the ROI or payback period.** Sometimes cost savings may not be realized in the first year due to up-front implementation costs. However, future periods should have increased efficiencies. Remember to also include the potential for increased revenue or staff productivity in the analysis, this can greatly increase the ROI or decrease the payback period.

Be sure to include a good diverse sample of clients and engagements in the proof-of-concept so that you can determine if different situations need to be handled differently or have different benefits/costs. This will also help to ensure that cost and benefit estimates also extrapolate well to the full population of clients and engagements.

The result of the proof-of-concept phase, should be a business case by the AEO, describing the outcomes realized by the engagements in the proof-of-concept and an analysis of the costs and potential benefits of the proof-of-concept itself, as well as for the firm as a whole. Lastly, the AEO should provide a recommendation for whether to, and how to proceed with a firm-wide rollout.

Key #5: Manage Expectations; Don't Over Sell It

Everyone hates it when a vendor totally oversells the benefits of their products and inflated expectations often get exposed upon actual use. So don't allow the AEO to oversell the benefits or make wild promises of how a certain technology or change will help individual engagements. Partners' expectations also need to be managed to ensure that the expected benefits can be realized for the firm as a whole.

Part of the objective of the proof-of-concept is to gather information to ensure that the expectations of a tool are realistic and achievable. Care should be taken to continue to gather data as the tool is deployed and monitor realized benefits against estimates. If the firm isn't going to be able to realize the full estimated benefits, this should be communicated to the firm's management so that they can validate the continuation of the implementation, or at least adjust their expectations accordingly. As with client engagements, the key to a successful implementation is to communicate actively and manage expectations.

Key #6: Adopt Organically, but Make It Required

After the proof-of-concept, the firm can choose to allow usage to grow organically or do a formal firm-wide rollout. Many firms found that once staff that were technology-friendly used a tool on one engagement, they tended to want to use it on their upcoming engagements as well. This allowed the use of a tool to spread organically through the firm's engagements as staff shared the use of the tool with other staff.

However, the challenge came in trying to get less technology-friendly staff to adopt a tool. Thus it is important to set a date by which the firm expects to see firm-wide adoption of a tool. This will help force those who are more resistant to the change to eventually make the change, but allow them time to slowly warm up to it. Staff who early adopt a tool can also help to ease this change, by helping convey the benefits and sharing their success with those resisting.

Key #7: Provide Training to Reduce Resistance to Change and Increase Adoption

Staff training in the use of technology has been one of the top identified priorities in the AICPA's Top Technology Initiatives survey for many years. Without proper training, staff may make up their own procedures or waste time trying to figure out how to use a tool. This will immediately reduce any potential time savings benefit from implementing the tool. Most vendors today, also provide train-the-trainer, technical documentation, web-based training, and even on-site training. Leverage these resources in conjunction with the scenarios tested through the proof-of-concept to develop a comprehensive training plan tailored to the needs of your firm and staff.

As noted above, part of the purpose of a proof-of-concept is to figure out the best way to use and rollout the tool for your firm. Use the learning from the proof-of-concept to develop cheat sheets and to document internal best practices. Consider using the vendor's self-paced learning to teach staff the basic functionality of a tool, then follow-up with firm-specific training, showing how the tool works within your firm's audit methodology or internal processes and procedures. Remember if staff don't use a tool, or if they don't use it properly, you can't realize the benefits that automation can provide.



The real return on time savings from audit automation comes when you take the time that was saved and use it to generate more revenue.

Key #8: Leverage Time Savings to Generate More Revenue

Many firms admitted that while they saw time savings from audit automation, this didn't result in real cost savings since staff are paid salaries and were more like a fixed cost. In fact, some partners felt that some tools actually increased engagement costs, especially when there was a per-transaction cost that was directly charged back to their engagements.

The real return on time savings from audit automation comes when you take the time that was saved and use it to generate more revenue. This could be in the form of taking on additional engagements with the same number of staff or also having staff that previously wasn't billable (e.g. admin staff) now perform a billable function.

OTHER RESOURCES AVAILABLE

Many of the key points of this paper are also identified as leading practices for process improvement and systems implementation projects. Additional guidance on managing systems implementations can be obtained from the AICPA's Information Technology Membership Section at <http://aicpa.org/infotech>.

Additional guidance for audit excellence is available from the AICPA's Audit Quality Centers:

- **Employee Benefit Plan Audit Quality Center:**
<http://www.aicpa.org/InterestAreas/EmployeeBenefitPlanAuditQuality>
- **Governmental Audit Quality Center:**
<http://www.aicpa.org/InterestAreas/GovernmentalAuditQuality>

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Donny Shimamoto, CPA/CITP, CGMA, is the founder of IntrapriseTechKnowlogies LLC, a CPA firm focused on organizational development and advisory services for the middle market. An active CPA, Certified Information Technology Professional (CITP), and Chartered Global Management Accountant (CGMA), Donny helps many organizations by bridging accounting and IT to strengthen organizational governance and risk management, improve business processes through IT, and increase the effectiveness of decision making through business intelligence. Donny also serves as an outsourced IT Audit "Partner" and advisor for smaller regional/local firms and internal audit departments who lack in-house IT management and IT audit expertise, helping with IT risk assessments and enabling increased staff proficiency with IT tools supporting internal and client engagements.

Donny is a member of the AICPA Council, Assurance Services Executive Committee (ASEC), and is the chair of the IT Executive Committee. Donny was recognized in 2012 as one of the Top Thought Leaders in Public Accounting by CPA Practice Advisor. He received the 2009-2010 President's Award from the Hawaii Society of CPAs, was named to CPA Technology Advisor's 40 Under 40 list in 2007 & 2009 and was also a Hawaii Top High Tech Leader in 2004.

ABOUT THE AUDIT WORKFLOW TOOLS:

Confirmation.com

As the exclusive Preferred Provider of Electronic Confirmations for AICPA Trusted Business AdvisorSM Solutions and for the American Bankers Association, Confirmation.com provides secure online confirmation services for auditors, banks and their shared clients. Confirmation.com's patented service minimizes fraud and brings efficiency to the audit confirmation process. In addition to its bank confirmation solution, the company provides solutions for more than 30 different types of audit confirmations, including accounts receivable confirmations. Several hundred In-Network responding companies, including all of the Top 10 banks in the U.S. and over 8,000 accounting firms in more than 100 countries, trust Confirmation.com for their audit confirmation needs. For more information, please visit cpa2biz.com/confirmation

XCM Solutions

XCM is a web-based workflow solution that automates and standardizes workflow processes across the entire firm, in all departments, including A&A, tax, consulting, and HR. Whether you're a sole practitioner, small, mid-size or large firm, XCM works with your firm's unique processes to increase efficiency, productivity and profitability. Offered through the Trusted Business AdvisorSM Solutions program from CPA2Biz. Learn more at www.CPA.com/Workflow

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Endnotes

¹ "How Inefficiencies Reduce the Risk of Confirmation Fraud", Capital Confirmation, Inc., 2010.

² Gary Boomer and Brian Fox, "The Boomer Advantage Guide to Electronic Confirmations", Boomer Consulting, Inc., 2010