



The Current State of New Technology in Auditing

WHITE PAPER

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“Accountants don’t have to be experts on robotic process automation, artificial intelligence, and blockchain. The key is to partner with technologists to offer clients a holistic view and build a stronger foundation of advisory services for your clients.”

– Amanda Wilkie, Consultant, Boomer Consulting, Inc.

Introduction

Ask the average person to picture an auditor, and they might envision someone hunched over a pile of paperwork or scanning endless columns of numbers. Of course, most accounting professionals today know that image is outdated in the new digital era. Today, auditors are less likely to be sorting through massive amounts of information manually and more likely to leverage innovative ideas and cutting-edge technology that allows them to spend time focusing on navigating client relationships.

Technology has an enormous impact on the profession. Thanks to new tools and resources, auditors are able to work smarter and more effectively — with each other and with clients.

Machine-learning based tools can rapidly analyze hundreds of documents and identify exceptions and outliers in a fraction of the time it took a decade ago. What used to require days of review can now happen in near real time.

Despite these advances, some firms are still hesitant to move forward with new technology in auditing processes and workflows. Some worry they don’t have the technological background to navigate the new digital world. Others have analysis paralysis, not knowing what they should be spending on technology and where.

In this white paper, we’ll take a look at current challenges affecting the profession, new technologies entering the audit area, and how firms can move forward.



Failing to address issues and loose ends results in high costs for maintenance and even more expensive fixes.

The Risk: Technical Debt

What happens when firms stick to the technology status quo? Technical debt.

The term technical debt describes the costs a firm incurs when they choose an expedient route over a long-term approach that would take more time and effort. Some examples are; supporting several versions of a desktop-based accounting solution rather than transitioning clients to the cloud, having users on different versions of Windows, maintaining several different “standard desktop” setups through the office, or running other applications that are no longer supported.

In the short term, the firm saves time and money by keeping the status quo. However, over the long-term, failing to address issues and loose ends results in high costs for maintenance and even more expensive fixes. The problem with technical debt, like all debt, is that it accrues interest that must be paid off before you make a new “purchase.”

The cost of technical debt has always been high, but it’s even higher today. As the capabilities of new technologies in auditing are growing exponentially, so does the cost of technical debt. It’s no longer just about ripping and replacing old computers and monitors, upgrading operating systems, and migrating to cloud-based applications. Now, the cost of technical debt hinders innovation. The resources used for maintaining substantial technical debt — fixing things that break and putting out fires that come out of nowhere — cannot be used for anything else.

It’s up to firm leaders to determine where they want to be on the adoption timeline. Do you want to be cutting edge and leverage technology? Do you want to be a fast follower, getting in once best practices are established? There are successful firms in both categories. Where you don’t want to land is with the laggards — firms that get into a cycle of technical debt, believing it never “makes sense” to move to new technologies because they’ve invested so much into the old.



If technical debt is holding your firm back from innovation, here is an overview of some of the advancements you are missing.

New Technologies in Auditing

Across the country, accounting firm leaders attend industry conferences and hear about the latest technologies impacting audit. If technical debt is holding your firm back from innovation, here is an overview of some of the advancements you are missing.

Risk-based auditing

Risk-based auditing has been around for a long time, but few firms have truly embraced it, either because they don't understand a true risk-based audit approach or because they don't have the tools to link audit procedures to risks.

Data collected by the AICPA Peer Review Program shows that more than 1 in 10 firms failed to comply with AU-C Section 315, *Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement* or AU-C Section 330, *Performing Audit Procedures in Response to Assessed Risks, and Evaluating the Audit Evidence Obtained*¹.

As a result, audit teams spend hours on low-risk areas with strong internal controls while higher-risk areas receive no more attention than that prescribed by a checklist.

Investing in technology that can tailor engagement procedures and documentation to risks to prevent over-auditing is the key to maximizing profits on an audit while achieving high audit quality.

Automated worksheet generation and management

Inputting the client's trial balance into the firm's audit solution, generating audit worksheets, and importing client data into those worksheets is a time-consuming aspect of any audit engagement. Even those with standardized audit procedures may deal with individual worksheet preferences that create inefficiencies for staff members performing the work.

Automating worksheet creation and trial balance data collection will help you achieve a more productive and profitable audit practice.

Audit analytics

Data analytics are an increasingly critical part of the audit workflow. It enables auditors to analyze larger data sets quickly and focus on outliers and exceptions, spend less time on sampling, and more time providing a higher level of insight into risks and client operations.

Audits have long delivered compliance and confidence in client's financial statements, and they will continue to do so. However, soon that may not be enough to meet clients' evolving expectations. Advances in technology now give organizations access to a breadth and depth of information that would have been unthinkable a decade ago, and forward-thinking firms are using that data to give them a competitive edge.

Rather than being focused solely on hindsight, audits that include data analytics can be more insightful and allow clients to take stock of their operations and adjust them to improve performance and gain a real advantage.

Automating low value tasks in your audit process and focusing on more effective audit procedures will allow your teams to deliver higher value to your clients. This takes you beyond compliance and into opportunity.

Budgeting for Innovation and Technology: A New Approach

In a changing landscape of technology in auditing, all firms — especially those with technical debt that is holding them back from investing in innovative audit technologies — need to rethink budgeting for innovation and technology. This isn't just about allocating more dollars to tech or adding new line items to your existing budget. It requires a whole new approach.

Every aspect of an accounting firm is evolving, from the services you offer to who you hire, so the way you budget should change as well.



To change the conversation around your IT spending, you need to know your audience.

Firms tend to spend the most on things that make the least impact: applications. They used to be able to buy a license for their software applications and use it for the next three to four years. Now, everything is moving to a subscription-based model, and the cost goes up by around three to five percent each year. Thus, if you are budgeting for a 3-5% increase in your technology spend each year, you're simply maintaining the status quo — nothing is going to innovation.

To change the conversation around your IT spending, you need to know your audience. Three classes of stakeholders typically have a seat at the table when it comes to budgeting for technology and innovation, each with their own set of priorities.

- **CFO/Finance Leaders.** Want to see the typical line items, such as operating and software costs.
- **Firm Leadership.** Interested in return on investment and what the firm will spend on security. Security spending can be difficult to split out because the costs are rolled up into applications.
- **Innovation Leaders.** Primarily concerned with the resources the firm is ready to dedicate to innovation.

It's tough to create one budget that addresses these three competing priorities, so we recommend developing three separate budgets, which all tie to the same final number, but frame the conversation differently based on who is having the conversation.

The budget for the CFO or other finance leaders can break your technology budget down into traditional line items:



Boomer Consulting Inc. Budget Template

ID Number	GL Account	2019 Budget		Description/Notes	Allocations						
		Items	Amount		IT	Finance	Dept 2	Dept 3	Dept 4	2019 Budget	Totals
		Expense Items	\$0		%	%	%	%	%		
		Staff & Personnel Expense - Total	\$0								
		Technology Staff Salaries	\$0								
		Technology Staff Benefits	\$0								
		Technology Staff Training	\$0								
		Other Technology Staff Related Costs	\$0								
		Outsourced Technology Services	\$0								
		Depreciation/Amortization/Lease Expense - Total	\$0								
		Hardware Depreciation	\$0								
		Software Amortization	\$0								
		Desktop/Systems Lease Expense	\$0								
		Networking Systems Lease Expense	\$0								
		Voice Systems Lease Expense	\$0								
		Operating Expenses	\$0								
		Equipment - Total	\$0								
		Servers & Related Networking Equipment	\$0								
		Cabling & Wireless Equipment	\$0								
		Computers	\$0								
		Printers, Scanners & Copiers	\$0								
		Presentation Equipment	\$0								
		Equipment Repairs and Maintenance	\$0								
		Software	\$0								
		Off-site recovery/Backup	\$0								
		Software & Software Maintenance - Total	\$0								
		Software Subscription and Maintenance	\$0								
		Operating System Upgrades	\$0								
		Accounting Related Applications	\$0								
		Dept 1 Software	\$0								
		Dept 2 Software	\$0								
		Dept 3 Software	\$0								
		Company Wide Applications	\$0								
		Time & Billing	\$0								
		Customer Relationship Management (CRM)	\$0								
		Document Management	\$0								
		Other Applications	\$0								
		Network Management Utilities and Tools	\$0								
		Communications - Total	\$0								
		Telephone Local Service	\$0								
		Telephone Long Distance/BOC Service	\$0								
		Cellular Expense	\$0								
		Internet Access	\$0								
		VoIP Telephone System	\$0								
		Voicemail Systems	\$0								
		WAN Circuit Expense	\$0								
		Remote Access	\$0								
		Video Conferencing / Collaboration	\$0								
		Web Hosting Fees	\$0								
		Total Technology Expenses	\$0								

The budgeting worksheet for firm leadership breaks out the costs differently to emphasize areas of importance or risks, such as security or shifts to infrastructure as a service (IaaS) platforms:



Boomer Consulting Inc. Budget Template

ID Number	G/L Account	2019 Budget		Allocations							2019 Budget	Totals	%
		Item	Amount	Description/Notes	IT	Finance	Dept 2	Dept 3	Dept 4				
		Expense Item	\$0		%	%	%	%	%				
		Staff & Personnel Expense - Total	\$0										
		Depreciation/Amortization/Lease Expense - Total	\$0										
		Hardware Depreciation	\$0										
		Software Amortization	\$0										
		Outsourcing/Lease Expense	\$0										
		Peripherals/Systems Lease Expense	\$0										
		Voice Systems Lease Expense	\$0										
		Operating Expenses	\$0										
		Equipment - Total	\$0										
		Software & Related Peripherals/Equipment	\$0										
		Cabling & Wireless Equipment	\$0										
		Computers	\$0										
		Printers, Scanners & Copiers	\$0										
		Presentation Equipment	\$0										
		Equipment Repairs and Maintenance	\$0										
		Supplies	\$0										
		Off-site recovery/Disaster	\$0										
		Software & Software Maintenance - Total	\$0										
		Software Subscription and Maintenance	\$0										
		Operating System Upgrades	\$0										
		Accounting/Related Applications	\$0										
		Dept 1 Software	\$0										
		Dept 2 Software	\$0										
		Dept 3 Software	\$0										
		Company Wide Applications	\$0										
		Time & Billing	\$0										
		Customer Relationship Management (CRM)	\$0										
		Document Management	\$0										
		Other Applications	\$0										
		Network Management Utilities and Tools	\$0										
		Local Costs	\$0										
		Communications - Total	\$0										
		Telephone Line Service	\$0										
		Telephone Line Database/DB Service	\$0										
		Cellular Expense	\$0										
		Internet Access	\$0										
		VoIP Telephone System	\$0										
		Voice Mail Systems	\$0										
		Web Consult Expense	\$0										
		Remote Access	\$0										
		Video Conference / Collaboration	\$0										
		Web Hosting Fees	\$0										
		Security	\$0										
		Intrusion Protection/Prevention	\$0										
		Intrusion Detection	\$0										
		Web Content Filter	\$0										
		Email Filtering	\$0										
		DMZ Services	\$0										
		Penetration Testing	\$0										
		Other/Security Consulting	\$0										
		Total Technology Expenses	\$0										

The worksheet for innovation leaders shows innovation spending by project:



Boomer Consulting Inc. Budget Template

CLASS	G/L	2019 Budget			Yearly Allocation				
		Project Breakout	Amount	Description/Notes	2019	2020	2021	2022	2023
Comm		Exchange Migration	\$0						
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Ops		CRM Deployment	\$0						
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Inno		Chatbot/AI Research & Deployment	\$0						
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Ops		SAN Refresh	\$0						
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Security		MFA Installation and Deployment	\$0	DUO					
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Apps		Engagement Upgrades	\$0	Includes new SQL Licensing					
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Comm		SOWAN	\$0	Decommission MPLS (\$/l - \$5 savings)					
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Security		Annual Pen Test	\$0						
		Consulting Fees	\$0						
		Software Subscription and Maintenance	\$0						
		Hardware Expense	\$0						
		Other Project Expense	\$0						
Ops		Non-Project Expenses - Total	\$0						
		Non-Project Staff Expense - Total	\$0						
		Depreciation/Amortization/Lease Expense - Total	\$0						
		Non-Project Equipment - Total	\$0						
		Non-Project Software & Software Maintenance - Total	\$0						
		Non-Project Communications - Total	\$0						
		Total Technology Expenses	\$0						

This budgeting method will help your IT leaders communicate that you need to invest in paying off technical debt to free up capacity and dollars to focus on more innovative projects.

Keep in mind, the technology budgeting process shouldn't be solely focused on internal operations. It should also look for ways to leverage technology with clients and create new revenue-generating opportunities. Many of the same technologies that allow firms to automate and streamline the audit process are also available to your clients' businesses. From data analytics to robotics process automation, there are numerous ways you can provide a higher level of value to your clients by investing in and applying technology to their businesses. By doing so, you fuel your firm's progress in improved performance, profitability, and growth.



Successful firms don't view technology as a cost of doing business but as a strategic asset.

Bridging the Gap Between Technology and Advisor

If your firm is not looking to invest in tools to help you automate routine audit work and streamline processes to do more work, you'll need a larger team capable of handling the increased workload manually. Additionally, you'll alienate the best candidates who are looking for experience with these emerging technologies. Attracting and retaining talent has been a challenge for years, so if hiring more people is your answer to scaling your business, you'll face a constant uphill battle.

Successful firms don't view technology as a cost of doing business but as a strategic asset. They build an IT leadership and governance model that helps harness the power of technology as an accelerator toward improved performance, profitability, and growth.

Headlines predicting the end of compliance work demand attention, but even with disruptive technologies like artificial intelligence, blockchain, and robotic process automation, audits are not going away. However, they will change, and auditors will need to be able to understand and leverage technology.

Just as technology is changing the landscape in our profession, your clients are being transformed as well. You will start to see more of your clients leveraging emerging technologies, and you will need to be able to incorporate them into your audit, especially when it comes to identifying and mitigating risks and evaluating internal controls.

As audits become much more focused on risks and internal controls rather than transactions, auditors don't need to become tech experts, just as you wouldn't expect IT professionals to understand the ins and outs of accounting. You don't have to become an expert on robotic process automation, artificial intelligence, and blockchain, but you will need to partner with technologists to offer clients a holistic view and build a stronger foundation of advisory services for your clients.





Conclusion

New technologies are impacting every area of your audit department and your firm, so managing the people, planning, and processes around technology is critical to the success of your firm.

Don't wait for "the future of audit" to compel you to change. In the long run, playing catch-up requires even more time, effort, and money than continuously investing in improvements that will keep your technology at a high level.

Start today by taking these initial steps:

- **Get IT budgeting in alignment with the firm's strategic plan.** Sound IT governance ensures that technology decisions are made in support of business goals and objectives. Without alignment between the firm's vision and technology, you'll have trouble focusing on initiatives that support the desired results. Start by developing a strategic plan for the firm (while giving IT a seat at the table) and then develop a technology plan that rolls up to and supports the firm's strategic objectives.
- **Create a technology steering committee.** A common mistake firms make is to label most (if not all) strategic initiatives as IT projects rather than firm projects. A cross-functional technology steering committee can create a more balanced collaboration because it has representation from all levels and service areas of the firm, including marketing, business development, training and learning, human resources, etc. This takes some of the pressure for execution off of IT.
- **Create professional development plans for your IT team.** Emerging technologies are changing the role of IT professionals and the skills necessary to be successful in the role. Technology certifications are important, but so is the development of success skills such as management, leadership, and communication. This will better position IT to understand how your firm delivers services to clients and help facilitate the identification and implementation of tools that will make their work easier and more efficient.
- **Make IT planning and budgeting a collaborative effort.** Many firm IT leaders dread the budgeting process. They present to a group that crunches numbers for a living, so tend to get beat up during the budgeting process. Using the budgeting templates outlined above can help the process go smoother. Another key strategy is to differentiate maintenance from innovation. The maintenance portion of the budget is required to keep the lights on — that doesn't need to be open for discussion. The conversation needs to revolve around innovative projects that will move the firm forward.
- **Join a peer network.** With the speed of change today — in technology and all areas of the profession — it's impossible to keep up if you operate in a vacuum. Step outside of your own four walls and learn from your peers. A peer network that brings together IT professionals and business leaders in the same room can point you in the direction of solutions you hadn't considered but should be exploring and bridge the gap between IT and firm management.



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About the Authors



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Jim Boomer, CEO of Boomer Consulting, Inc., is an expert on managing technology within an accounting firm. He serves as the director of the Boomer Technology Circles, The Advisor Circle, and the CIO Circle.

He also acts as a strategic planning and technology consultant and firm adviser to CPA firms across the country. Accounting Today called him a “thought leader who can help accountants create next-generation firms.”



Amanda Wilkie

Amanda Wilkie, Consultant at Boomer Consulting, Inc., has a computer science background paired with extensive experience in the accounting profession. With two decades of technology experience, Amanda has spent 15 years driving change and process improvement through innovative technology solutions working across firms of varying sizes in the public accounting profession. She has held strategic leadership positions in firms ranging from Top 50 to Top 10 including her role as CIO of a Top 30 firm.

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