

Becoming Future Ready



Virginia Society of
Certified Public
Accountants

Data Analytics, Cybersecurity Key Topics at A&A

Speakers covered many topics at the 48th Annual Virginia Accounting & Auditing Conference (A&A) in Roanoke and Falls Church, but the overarching theme was clear: It's crucial to future-proof your practice. Technology is both the biggest threat to an accounting practice in 2018 and its greatest salvation. The VSCPA's oldest conference, a partnership with Virginia Tech, drew 219 attendees at the Fairview Park Marriott Hotel on Sept. 27–28 and 306 at the Hotel Roanoke & Conference Center on Oct. 1–2. A third conference is scheduled for Nov. 15–16 at the Hilton Norfolk The Main. Here's our recap of the Roanoke and Falls Church events.

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Making Data Work for You

VSCPA member Joan Renner, CPA, shareholder at Renner & Co. in Alexandria, touched on her own career in her session "Today's Analytical Procedures — A Practical Approach." Her session covered the challenges that come in marrying technological advances in the area of data analytics to the rigorous Generally Accepted Auditing Standards (GAAS) that already exist.

"The challenge in this particular topic is that we know our auditing standards. There are people who know data analytics software, but they aren't auditors," she said. "The challenge is connecting what data analytics can do with what we do every day."

Renner pointed out that GAAS haven't changed. Audit procedures are still aimed at assessing and addressing the risk of material misstatement. Data analytics are best viewed as a tool to accomplish those goals.

Auditors start by gaining an understanding of a business and its systems, then walk through key controls and perform planning analytical procedures before assessing audit risk. They then address those risks



Joan Renner

with substantive tests, including analytical procedures, perform those analytical procedures, then evaluate their findings and issue a report.

"It's not a black box where you put out a bunch of charts," Renner said. "It's addressing a risk you may have assessed and reducing that risk to an acceptably low level."

Analytical procedures can also help by bringing in nonfinancial data — a head count of registrants for an event, or a monthly customer count from a point-of-sale system, or even the number of meals served at a banquet. Those figures can serve as plausible approximations for certain types of financial data.

Other uses include identifying "fuzzy duplicates" in databases — Brookings Institution vs. The Brookings Institute, for example — or in finding potential fraud indicators, such as multiple employees being shown with the same address or bank account. Organizations could also make use of Benford's Law, which deals with the statistical frequency of the first digit of numbers in sets of data, in analysis.

"Analytical procedures are powerful tools. They support audit effectiveness because they show things that don't look right," Renner said. "They support audit efficiency because when we get to ►

a point where things look right, we're done."

Another application for data analytics — one that the VSCPA has touched on before — is in auditing a larger sample size, or even an entire population.

"I remember editing big, heavy books that were written in pen," Renner said. "You couldn't possibly look at every entry. You had to sample. I believe in the value of sampling. Sampling is darn good. If you have a sample size that corresponds to your materiality level and the size of your organization, that's good.

"There's nothing wrong with sampling. It's just that if we had electronic books forever, we wouldn't have been encouraged to do sampling. We'd have been encouraged to do things like this all along."

Some analytics software is even more capable of identifying risk. MindBridge incorporates artificial intelligence (AI) technology and can evaluate every transaction in a general ledger by risk — high, medium or low. Tableau is aimed at creating attractive data visualizations to impart information to non-accountants.

Software that incorporates AI can go even further in analyzing risks like numerous transactions being processed by the same person, or being processed by the CFO on a Saturday.

"Typically in big companies, people might not work on nights and weekends," Renner said. "If you see somebody going into the office on nights and weekends, that's a sign of a risky transaction that needs to be looked at more

Substantive Procedures, Then and Now

Traditional substantive analytical procedures:

- Comparison of recorded amounts to a recalculation using independent information
- Comparison to prior year if comparability is expectation
- Comparison of ratios using recorded numbers to expected relationships

Newer substantive procedures:

- Search audit trail report for:
 - Transaction dates outside current period
 - Transactions entered outside normal business hours
 - Large, round numbers
 - Transactions entered by CFO instead of finance staff

closely."

You may already be using a widely used analytics tool: Excel. The Microsoft product offers analytic capabilities and chart visualizations in an accessible format, although its limitations are clear. Users must scrub data into a usable format and must know the proper formulas. Excel does not control the integrity of data or facilitate audit documentation.

The American Institute of CPAs (AICPA) offers limited guidance in the analytics area. Essentially, if a product moves your audit procedures forward, it's appropriate.

"They don't tell you what software to use for what procedures," Renner said. "They tell you to use your best judgment, but stay tuned for further developments in this area." ■

Accounting in Extraordinary Times

Another VSCPA member, Jim Brackens, CPA, vice president of

ethics and practice quality at the American Institute of CPAs (AICPA), echoed Renner's thoughts in his general session at the Roanoke conference, "Accounting in Extraordinary Times."

Brackens cited predictions that an estimated 40 percent of basic accounting functions will be eliminated by technology by 2020 and mentioned technology as an area of explosive growth for CPAs — so much so that the AICPA and the National Association of State Boards of Accountancy (NASBA) are pushing an expanded pathway to CPA licensure for non-accounting graduates with technology and analytical expertise.

"These individuals are providing assurance. They're on the teams now. But they can't sign the audit report because they're not CPAs," he said. "They have to go back to school and get the requisite education in accounting, and they have to take the CPA Exam, and the thought is: Why? What's to stop these individuals from ►

saying, 'I can do that?'"

Brackens, continuing on a theme the VSCPA has discussed for the past several years, hit upon numerous issues affecting the future of the profession. Nearly three-quarters of CEOs said their businesses aim to be disruptors, and 65 percent view digital disruption as an opportunity.

And the speed of change is increasing. In 1958, the average tenure of a corporation in the S&P 500 was 61 years. By 1980, that was down to 25 years; in 2011, it was eight years. According to research from Innosight, by 2027, 75 percent of companies currently on the listing might not be there.

Where does that leave CPAs looking for growth? Technology is the most likely answer as a driver of auditing, compilation and review and the big one, cybersecurity risk management, with 63 percent of executives indicating that requests for cybersecurity risk management program reporting to rise in the next year and one-third planning to adopt the AICPA's System and Organization Controls (SOC) for Cybersecurity framework.

Accounting education programs will need to adjust to the new reality, and Brackens cited his alma mater as a university that recognizes where the profession is headed. This fall, Virginia Tech enrolled the first students in its KPMG Master of Accounting With Data and Analytics program, a partnership with the Big Four firm that pays for



Jim Brackens

students' tuition, room and board in exchange for an agreement to work for KPMG for three years.

"Hiring at the largest firms is basically flat," he said. "What's troubling is that hiring of accounting graduates is declining. What they need are employees with technology skills."

Audit quality is another major area of focus for the profession, as shown by the AICPA's Enhancing Audit Quality (EAQ) initiative. The areas of focus for 2018 are peer review, documentation, risk assessment, Circular A-133 single audits, specialization and auditing in the future.

The AICPA's peer review initiatives are aimed at improving detection of non-conformity. In the first year of the AICPA's enhanced oversight program, 43 percent of engagements were nonconforming, and peer reviewers detected just 18 percent of them. In the three years since, that detection rate has risen to 40 percent, 47 percent and 62 percent in 2017.

"Obviously, we'd like the peer reviews to recognize it at the same rate as the subject matter expert, but that's never going to happen," Brackens said. "If your reviewer isn't recognizing problems, you're never going to be able to remediate. And peer review is meant to be remedial, not punitive. We want you to get better."

More than half of those nonconforming audits had issues with documentation. Common misconceptions cited included:

- Auditors can meet overall audit objectives without documentation

- A signoff on an audit program is sufficient documentation of a detailed test
- Oral explanation can substitute for written documentation to meet the requirements of the standard

"An experienced auditor has to be able to follow behind you and determine what you did, to re-perform your audit without asking detailed questions," Brackens said.

As highlighted in previous reports and sessions, specialization is perhaps the greatest predictor of audit quality. By focusing on specific areas instead of generalizing, CPA can provide more quality and value to their clients.

"It takes a focus in an area for us to do quality work," Brackens said. "If you're a tax practitioner, do not do one audit. Do not do all things. But if you choose one area, you can do it extremely, extremely well." ■

Virginia's Changing Economic and Political Landscape

As Jim Brackens detailed, change is coming fast and furious to the accounting profession. That goes double for the profession in Virginia, where disruption is coming in forms both economic — with the possibility of Amazon's second headquarters landing in the Commonwealth — and political, in the form of a still-green crop of new legislators tasked with implementing the biggest tax reform package in three decades.

VSCPA Vice President, Advocacy Emily Walker, CAE, discussed those issues in her A&A session in Roanoke, "Navigating the Economic ►

and Political Landscape.” She kicked off her presentation with a bit of good news — that 2018 brought 14,000 new jobs and \$4.37 billion in total investment to the Virginia economy.

As always in Virginia, the government has a lot to do with those numbers. That includes both the federal government, a major supplier of jobs and money to Virginia, and the state government, along with the private sector.

“State government needs to be a catalyst and a partner for this development,” Walker said.

While Amazon is the big fish, Virginia has long prided itself on its business climate in attracting new business to the state. The top five (actually, six) site selection factors for 2018 are:

1. Highway accessibility
2. Labor costs
3. Availability of skilled labor
4. Quality of life
5. (tie) Tax exemptions, occupancy/construction costs

You’ll notice the absence of health care, which was a major question as recently as this past spring. But the General Assembly passed a budget approving Medicaid expansion May 31, with Gov. Ralph Northam signing it into law a week later.

That news removed a major question mark for businesses considering expanding in Virginia. Walker said that factor was “more of a feeling than a science” as CEOs responded to sequestration in 2013 and announcements from other states. But perception became reality as Virginia dropped

The 6 Pillars of Growing Economies

From the Virginia Chamber of Commerce’s Blueprint 2025 report:

- Investing in a well-trained talent supply pipeline
- Improving infrastructure and capacity for business leadership
- Fostering a competitive pro-business climate
- Facilitating regional prosperity and economic development
- Enabling innovation and entrepreneurship
- Creating a high quality of life and place

from its usual perch atop business climate rankings to a low position of 13th in the CNBC rankings.

“We really hit an all-time low in 2015, and it had a lot to do with our neighboring states,” Walker said. “West Virginia is now a right-to-work state. North Carolina had some state and local tax reform. We have not had these announcements.

“When other states are changing their environment and coming to Virginia’s standards, it makes us look relatively worse. But we are starting to move back up.”

The Virginia Chamber of Commerce responded to the initial drop with its Blueprint Virginia plan, initially released in 2013 and updated last year. The plan, initially developed by a group that included VSCPA Chair-Elect Gary Thomson, CPA, identified six pillars of growing economies.

“It’s a rallying cry or a guidance document,” Walker said. “Our last two governors have really relied on this, and our legislature as a whole, when they want to tackle business issues, the first place they go is to the blueprint.”

Conditions are just as volatile in the state government, with Republicans holding slim majorities in the House of Delegates and Senate and Democrat Ralph Northam

serving as governor. In practice, this means that legislative progress takes longer because of the necessary compromise.

Complicating matters further is the blue wave that shook up the House last year. Republicans went from a comfortable majority to holding the chamber by virtue of a random drawing in a Newport News election that ended in a literal tie. Del. David Yancey won the drawing to win the seat over Democrat Shelly Simonds, who had initially been declared the winner by one vote.

Of the current members of the General Assembly:

- 41 percent have served for four years or less
- 21 percent are business professionals
- 30 percent have a law degree
- 27 percent are female
- 19 percent are military veterans

“When we think about legislators, we think about Congress, where they are full-time legislators. We don’t have that in Virginia,” Walker said.

If that wasn’t enough, 2019 is a short session in Virginia, meaning the Assembly will convene for just ▶

46 days unless an extension is deemed necessary. That leaves a short amount of time to cover a lot of legislation, including Virginia's response to the Tax Cuts and Jobs Act (TCJA) of 2017. The VSCPA recently released a whitepaper detailing its official position on tax conformity as it relates to the TCJA.

In the 2018 session, the VSCPA elected to push the lion's share of its response to the TCJA off to the future in order to allow the 2017 tax season to start on time. At the time, the Society had hoped for a special session in the fall to cover Virginia's response to the TCJA, but that session was called off because of a lack of guidance from the U.S. Internal Revenue Service on federal tax reform. That means Virginia will need to address both conformity and possible policy reforms in those 46 days.

"One of our hopes for a special session was that they might be able to address conformity much earlier than we're accustomed to," Walker said. "We've gotten used to 'Conformity happens in January and gets signed in February.'"

SEE MORE: <https://www.vachamber.com/wp-content/uploads/2018/02/Blueprint-Virginia-2025.pdf>

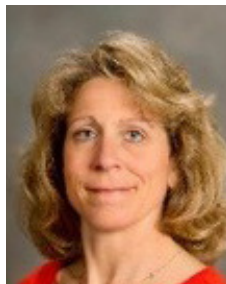
<https://www.vscpa.com/sites/default/files/resources/TaxConformityWhitepaper.pdf> ■

The Importance of an Inclusive Workplace

To best serve a diverse client base, CPAs must consider diverse viewpoints. Confronting and considering other perspectives helps us be aware of, and navigate past, our personal blind spots. What's the best way to make sure we're exposed to those perspectives?

That was the thrust of Alicia Cohen's A&A session, "Nurturing Diversity in the Workplace." Cohen, the director of diversity programs at Virginia Tech's Office for Inclusion and Diversity, kicked off her presentation by having attendees fill in a "Social Identity Wheel" that detailed the identities (racial, religion, sexual orientation, age, etc.) that were most important to them.

"We belong to groups, often multiple groups, that affect our personal identities," Cohen said. "We



Alicia Cohen

typically think that the groups that we belong to are better than other groups."

Some components of a person's identity are visible and some aren't. The way those components manifest themselves, and how aware people in a conversation or meeting are of them, can have a great impact on how people share their perspectives.

"If I walk into a meeting and I'm the only female, that aspect of my identity is very salient," Cohen said. "I am much more deliberate in what I say and do, because eyes are on me in a way they wouldn't be if I were one of multiple women."

And the emphasis on visible identity markers can obscure the things that a diverse group of people can have in common, be it interests, preferences or senses of humor — all the elements that play into building friendships and teams.

"When we start connecting with people, we find out other things that aren't visible. 'This person likes to do XYZ. I didn't know that,'" Cohen said. "And it helps us connect with them, and we feel more valued. We might understand why a person acts a certain way or does certain things.

"We don't always know people's stories. It's easy to jump to conclusions."

And it's important to be mindful of the many reasons people have for taking different actions. Cohen cited the example of a person who didn't attend group lunches and therefore might have missed out on networking and advancement opportunities.

"There could be all sorts of reasons why this person couldn't join in," she said. "They may not be financially able. They may have dietary restrictions that make it too much of a hassle. They may use lunchtime to do certain errands. They may need to be by themselves.

"What matters is that they're supporting the team by doing the work they're supposed to be doing."

All those factors play into the best ways to encourage diverse perspectives: Encouragement (whether in the form of hiring or taking a genuine interest) and listening. The latter is more difficult than it sounds — it takes active listening to understand to truly appreciate a person's perspective.

"We're not taught how to listen. We're taught how ▶

to talk,” Cohen said. “We’re not really good at listening, and it may be because our brain functions so quickly.” ■

They Said it: Cybersecurity and Technology

Randy Johnston is a longtime VSCPA technology partner, having led numerous events and spoken at the A&A for several years. (His company, K2 Technologies, is partnering with the VSCPA for the Tech-Know Summit on Oct. 25–26 at the Richmond CPA Center.) Cindy Gross, CPA, is a director in the information technology audit practice at Brown Edwards in Harrisonburg. Both led sessions on cybersecurity best practices at A&A. Here, in their own words, are the top takeaways.

“If you have one takeaway from this session, it’s that you need to be using two-factor authentication.” — Randy Johnston

“The time that it takes to compromise most systems is minutes. The time it takes to discover it is months.” — Randy Johnston

“Training people to adopt security-conscious behaviors is hard. You need to be in front of them often.” — Cindy Gross

“Multifactor [authentication] protects you by having something that you have, and a bad actor can’t break in as easily if they don’t have it.” — Randy Johnston

“Most people know that when you dispose of a laptop or a desktop, you have to destroy the hard drive. But you might not think about the

big printer that might have a memory card in it. You need to think about anything that might contain important information in that way.” — Cindy Gross

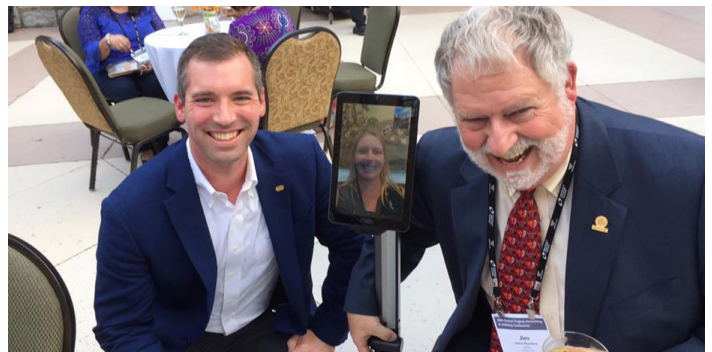
“Facial recognition should just be a secondary factor. It shouldn’t be your only factor. The Windows PIN code is more secure than the Face ID and so forth, and why? The PIN code is only stored locally and can only be used there. You need to have a primary way you can get in and a safety way you can get in. Face can’t be your only way.” — Randy Johnston

“Training is really critical. If anything at all smells off about an email you receive, if it seems odd or you don’t normally conduct a transaction in that way, send it to IT.” — Cindy Gross ■

Spotted at A&A



Attendees at the A&A conferences had the chance to network at receptions in Roanoke and Falls Church (pictured).



VSCPA members Tres Brackens, CPA (left), and his father, Jim Brackens, CPA (right) catch up with “TaterBot” in Roanoke.



VSCPA President & CEO Stephanie Peters, CAE, introduces member Joe McNamara, CPA, a candidate for the Virginia House of Delegates, at the Roanoke networking reception.



VSCPA members (from left) Diane Dickson, CPA; Joan Renner, CPA; John Renner, CPA; Bill Young, CPA; and Lynn Almond, CPA, catch up at the Falls Church networking reception.