

Foresight: The CPA Podcast

Season 2 Episode 1: Mid-Career CPAs and the need to embrace technology

David McGuffin: Welcome back to season two of Foresight, the CPA podcast. I'm your host, David McGuffin. It's so great to be back. This season, we'll be bringing you more of the great stories and insights about how the landscape is changing for CPAs and we'll bring you even closer to your fellow CPAs, introducing you to professionals who are embracing the challenge. These are people who love to innovate. They're quick to embrace new technologies and they seek out new ways of doing traditional activities.

Here's an example. How about using a drone to conduct an audit? That's right, a drone, the kind that requires a pilot's license to operate. Later in this episode, we'll speak to one partner at EY who's taking innovation to the next level, literally.

But first, if you're a mid-career CPA, you don't necessarily need to learn to fly to stay ahead. However, you may need to shift your mindset. One reason for that is the updated competency map for CPAs, which aims to produce a new kind of professional accountant. Irene Wiecek was part of the team that created the new competency map. She's a professor of accounting at the University of Toronto. Irene, thanks so much for joining us.

Irene Wiecek: Thanks for having me, David.

David McGuffin: So describe for us the CPA of the future as you see it.

Irene Wiecek: Wow. Okay. So the CPA of the future will be future focused, so a little bit more looking forward, more looking at where we're going as opposed to where we have been. In the past, perhaps much of what CPAs do is looking at hindsight, auditing historical financial statements, doing tax returns, doing budgets to actuals. Many CPAs, of course, do forward looking things like wealth management, tax planning, but the CPA of the future is going to shift a little bit more towards the foresight. Less about hindsight, more about foresight. And of course, the CPA of the future will be tech savvy and have a systems mindset that will embrace the systems, the hyper connectedness that surrounds us increasingly every day.

David McGuffin: So I'm just curious, how much of a threat are these new crops of CPAs coming in to, say, an older generation that's been around and has a very different kind of skill set or education set?



Irene Wiecek: Yeah, that's a good question. I think that's always been there, the young people coming in who've got different outlooks and different mindsets and different skill sets. I think though now it's bigger because this technology is not just, "Oh, here's a new tool." It's a paradigm shift. It's a whole different way of thinking about things. If you say, "I'm going to go digital," well, literally you could think, "Okay, that just means me taking something paper based and putting it into machine readable form." But then if you want to digitalize something in your business, it's don't just try and use the technology to do exactly what you used to do when you're doing it manually. It's like, rethink it. You don't need to just do exactly the same thing. You now have these powerful tools and this connectivity so there's a better way to do it and you can streamline it.

David McGuffin: So then how does a mid-career CPA learn these new tools?

Irene Wiecek: There's so many opportunities to upskill. So if you're a mid-career and you say, "Look, I want to do this," there's nothing to stop you from doing that. Do it. Go and learn a little bit. Take a course. There's so much there that's available to everybody so I don't think there's any excuse, except if you don't have the growth mindset, you don't want to do it because that's the way you've always done it and that's the way you want to continue doing it. That's the danger, I think. But if you say, "No, you should get up every morning and really embrace what's new, what's on the table today, what's coming through your LinkedIn feed." Embrace it and think about how you're going to go forward. In the competency map, we call that evergreen learning. It's sort of that curiosity. It's a thirst for knowledge and it's a commitment to continue to learn. So where CPD is probably that third one, the commitment, the first one, curiosity and a thirst for knowledge. Get up every day thirsty to say, what can I make better? How can I improve performance today? That to me is going to be the big change.

David McGuffin: The challenge, however, is not just having the desire to do this sort of thing but having the time.

Irene Wiecek: That's another risk for the mid-career is they're very busy. People are busy so they don't have time to just sit and think about, "Oh, I want to be curious today." They're like, "I got a hundred things to do today and being curious is going to take up too much time." So it's a trade off. But unless you have that curiosity, you will not have that potential to really reap significant gains as you go forward. So I think that evergreen mindset is critical, and I think maybe mid-career people have to think about how they do that themselves and then how they help their staff and their colleagues learn and be curious and embrace that thirst for knowledge. Do you set time aside every week?

Irene Wiecek: I mean, some companies who are forward in this area are saying, "Every Friday you have to at least spend one or two hours, and we're going to give you that one or two hours, or



every month you get three days off to do a course." It's a significant investment but the gains and the potential for gains are so great. So the company's got to buy into it. The company's got to say, "We do think this is important and we're going to give you time to do that and reward you." So it is a little bit of a shift more towards an innovators kind of environment where curiosity and an innovation place would be.

David McGuffin: Irene, thanks so much for coming on the podcast.

Irene Wiecek: Thanks, David.

David McGuffin: Irene Wiecek is a professor at the University of Toronto. You heard Irene say the real danger for mid-career CPAs does not come so much from the next generation of CPAs, it comes from not having a growth mindset, doing things the same way because that's the way you've always done it. That's definitely not how Andrew Morgan approaches his role at EY. Andrew is a partner in charge of data analytics for the financial services audit practice. He's also a member of EY's Audit Innovation Lab. You're about to hear why that's a good fit for him.

David McGuffin: So Andrew Morgan, thanks so much for coming on the podcast.

Andrew Morgan: Great to be here.

David McGuffin: So one of the reasons we wanted to get you on here is because you do some pretty untraditional things when it comes to doing audits, and one of those untraditional things is the use of a drone, and I'm just wondering if you can explain to us how that works.

Andrew Morgan: Yeah, certainly. So the idea to use a drone came to me while I was doing an inventory count, actually. I was out in the parking lot counting vehicles for one of my clients and as you can imagine, it's a big lot, lots of vehicles to count and I figured, "There's got to be an easier way to do this." So sort of thinking around about a few different options, the first thing I actually tried was to do it using satellite photos. And you can actually go online and there are vendors that will sell you satellite photos of different parts of the earth at different points in time. So we bought one of those, quite recent one close to the balance sheet date, and we tried counting those from space, first of all. But the problem with that is that it's very grainy. You don't get the level of detail that you really need to be able to see it. And also, you have less control over exactly when the photo is taken.

So after that one didn't work out, then what we did is we decided to get a little bit closer to the vehicles and decided to do it by drone. So the first year we did it, I actually hired an external drone pilot to do it. He came and flew his drone over the parking lot, took about 300 pictures and stitched them all together into one big picture and then we were able to see the vehicles very



clearly and to complete the count that way. And then the second year we did it, during that year I went out and got my own drone license. So in Canada, first you get your basic drone license, you do an online test and then after that, if you want to get your advanced drone license you do another test and then you do an in-person test as well. So I got that and then I also got my U.S. drone license so I could cover lots down there.

So with that, I went back the next year, and the firm bought a drone, flew with that and put that up in the air and I sort of essentially repeated the same exercise but doing it myself. So taking the 300 pictures, stitching them together and counting the vehicles that way.

David McGuffin: Fantastic. So when you're using the drone, I mean, how do you know, for instance, all the vehicles are all functioning vehicles and that sort of thing?

Andrew Morgan: Yeah, it's a good point. The drone itself won't tell you whether the vehicle turns on, it won't tell you whether your client owns the vehicle, for example. So using the drone is just part of the audit. Good comfort that number of vehicles are in the lot but you still have to go and we got keys for 25 of the vehicles, got in them, made sure they turned on, we looked at the VINs and got the title and registration to confirm who owned it. So you're right, it's not like the whole audit is done by drone, but it supplements and enhances some of the physical inspection components that are present in inventory accounts.

David McGuffin: I mean, is there a way to quantify how much more efficient that is than what you were doing before or is-

Andrew Morgan: Yeah. In this case, there's an element of quality over efficiency. When you do an inventory count, you often only count a sample of them, of vehicles, so it might be 25 or 50 vehicles that you do account of. With a drone, you can count 1,000, 2,000, you can do a hundred population counts. So the biggest gain I see is in the quality of the execution of the audit procedures as opposed to efficiency when it comes to a vehicle account in particular.

David McGuffin: [inaudible 00:10:04] your clients are happy with it?

Andrew Morgan: Yep. Yeah. Yeah. They all found it very interesting.

David McGuffin: I bet. I bet. I mean, you're talking about cars, have you used it for other kinds of inventory counts since then?

Andrew Morgan: Yeah. So we also then expanded into doing warehouse counts, and this is one where maybe the efficiency comes into play a little bit more. When you do a warehouse count, you'll often pick some from the inventory list that you want to find on the shelf and then you pick



some from the shelf and try to match them to the sheet as well. And every time you pick one item, assuming it's not at ground level, which is the case for a lot of the samples, you find the aisle and you find the shelf but then you have to call over the forklift truck. And because of safety considerations, they essentially have to shut down that aisle. You, as the auditor, move out of the aisle as the forklift truck comes in, you watch it reach up 10 meters or so to the shelf, pick your pallet off and bring it down. Then they open the aisle back up and you can go and inspect the pallet. So it can take something like three hours to just count 25 items, assuming that you're constantly moving around a fairly large warehouse.

But when we did it with the drone, we were able to count the 25 items in about 45 minutes, so it was quite fast that way. And you didn't have the same sort of mechanics of having to shut down aisles and reopen them. And the advantage with this one is when we brought the drone up, you could really see the product from the drone itself. We took pictures straight on and moved slightly to the right and slightly to the left so we could see down the sides of the pallet and took pictures along the top as well. And then we had to get close enough to get some of the barcodes in the pictures. So you can really do a lot of the inspection and look for dust signs of obsolescence or damage that you can do at ground level.

David McGuffin: Interesting. I mean, these are all innovative uses of new technology. I'm just wondering, are there different kinds of tools that you're using to help you with audits as well?

Andrew Morgan: Yeah, Another one we worked on... So we're going to do some drone work up at a mining site, and a lot of the mining sites have these large attractions of ore that sit on the ground. Historically, we would typically rely on a surveyor to help us with measurements and then try to recalculate the volume of cones and things like that, but we found we were actually able to do it just on an iPhone. The iPhone has many of the same position data that can be attached to photos, so we ended up just took the phone, took enough pictures all the way around the pile and then measure the volume that way.

David McGuffin: Wow. That's amazing. So just your iPhone, your smartphone?

Andrew Morgan: Yep.

David McGuffin: Wow. That is really incredible. I mean, these are very novel approaches to a very traditional role as a CPA, have you got pushback against using these sort of new, innovative ways?

Andrew Morgan: Yeah. Whenever you try to change up the audit methodology there's always a question of, is it sufficient? Are you covering off all of the risks? By not physically interacting with the inventory yourself do you lose some of the assessment of quality or items like that? I think



that's why, for example, with the vehicle account, we still had to do some additional procedures beyond just the count itself. So we get a little bit of pushback if this is just going to be the only procedure then there's a little bit of a resistance, but you augment it with some other procedures. You can cover off all of your auto risks that way.

David McGuffin: So beyond drones, beyond the app, what other things are you playing with as you're working on your audits?

Andrew Morgan: Yeah. So I really like doing data visualization of data sets and quite often in our audits, we're getting these large data sets of whole populations rather than just samples. And I started off doing just software-based visualizations, so using Tableau or Power BI or other sort of graphing tools to create dashboards and sort of slice and dice the data in new and interesting ways, looking for outliers.

But then expanded a bit further, bought a 3D printer a few years ago and started playing around with that and I realized that you can actually 3D print data as well. So there, I created sort of a graph essentially, a physical graph of one of my clients' monthly PNLs by segment. You lay it out in this design software, you put a square base to it and a bunch of columns, and the height of the column for the corresponding month and division shows the profit and loss for that division for the month. So you get a real, tangible sort of piece of the audit can look at from different angles that you can interact with. It's a lot more impactful than just seeing it on a screen when you actually print it off of a 3D printer and look at it that way.

David McGuffin: Fantastic.

Andrew Morgan: And then I'm always a big believer in if you're trying to learn about new technology you should apply it yourself first in your own personal life and then apply it to clients. So as Bitcoin and other cryptocurrencies were taking off, I bought a cryptocurrency miner online and brought it to my house, plugged it into my basement and started just mining a little bit of Bitcoin on the side. I joke that because of electricity prices it was not a profitable enterprise, not in Ontario, at least and-

David McGuffin: Quebec, maybe.

Andrew Morgan: Yeah. Yep, that's possible. You got to find cheap electricity. That's the key to a profitable Bitcoin mining operation.

But by actually interacting with Bitcoin and trying to generate it yourself, you learn so much more about it than just reading about it on online or watching videos because you have to problem solve it. You have to set it up, you have to figure out how do you get it to deposit it into a wallet. What's



a mining pool? How do you participate in it? What's the yield? And then you run the economics and understand just how much electricity it's using up and the broader impact of some of the side effects or sort of externalities of Bitcoin mining. But that's really how I got into understanding that new technology as well. Again, it's a personal interaction in your personal life which then once you figured it out you can apply it professionally.

David McGuffin: How do you use that in your work?

Andrew Morgan: So now I have clients that I own Bitcoin and other cryptocurrencies and so I audit them today as part of my professional life.

David McGuffin: Irene Wiecek talked about the need for mid-career CPAs to have a growth mindset, a desire to learn new things, develop new skills, foster curiosity. You obviously do this. I mean, what's your secret?

Andrew Morgan: Well, you always want to be curious about new technology and emerging methods. It keeps the audit interesting, keeps your professional life interesting because you don't want to repeat the same procedures again and again for 30 or 40 years. And the new technology often has good ways to improve efficiency, provide clients with new insights, allow them to see their own data in a new light or from a new perspective. So if you're always interested in how can you improve the process I think that really drives a lot of the curiosity and exploration around new tools.

David McGuffin: So over the next decade or so how important do you think it'll be for CPAs to have this sort of innovator mindset that we're talking about here?

Andrew Morgan: Yeah, it's absolutely critical because the knowledge that you finish university with will not be enough to carry you through your whole career. Every year there's going to be new technology and new approaches being released and so it's important to always stay on top of the developing technologies, learn how to operate them, experiment, test them out on clients and test data as well. See what works, see what doesn't work. Sometimes new products, they're just too complicated or there's something that makes them a little bit difficult to use, but others work very well and you can either cut hours or improve efficiency substantially on the audits.

David McGuffin: Fantastic. Well, thank you, Andrew. I mean, I think there's a lot of food for thought here so I really appreciate you coming on.

Andrew Morgan: Well, great. Thank you very much for having me.



David McGuffin: Andrew Morgan is a partner at EY in Toronto. So if you're mid-career and you want to upgrade your skills, what's the first step? We put that question to Ashley Alvernaz. She's CPA Canada's Lead for Program Development.

Ashley Alvernaz: I think the first step is you would want to identify specifically what you're wanting to work on. Are you wanting to become more efficient at ETL, extract transform load techniques? Do you want to implement robotic process automation in your organization? Are you looking to stay up to date on the latest tech trends and their impacts on the accounting function?

There's a lot of crossover between these types of topics, but it's helpful to start with that specific item you're most interested in learning more about. The complimentary resource is are really great place to start your learning. But if you're wanting to develop something a bit more in depth, we have webinars, workshops, e-learning courses, and online certificates as well.

David McGuffin: And where can CPAs find these resources?

Ashley Alvernaz: Yeah, so the website sometimes can be a little tricky to navigate, and so we recently released something called the Learning Library, and it's a little bit more user-friendly. You can filter by a variety of different ways. So I'd recommend go there.

If you still can't find what you're looking for, then I would reach out to our sales or customer service teams. They're really well-versed in all of our offerings and then they can help make the appropriate recommendation.

David McGuffin: And what if CPAs are looking for something that isn't there? Is there a way to suggest topics?

Ashley Alvernaz: Yeah. Again, you could contact sales or customer service and they would be able to identify the appropriate person, I think, depending on the topic of what the suggestion is.

We more than welcome any suggestions. Ultimately, what we're trying to produce is for the membership. So if they have a need and they're not seeing that need met, then we want to try and bridge that gap.

David McGuffin: Ashley Alvernaz, she's CPA Canada's Lead Program Development.

And that's it for this episode of Foresight. If you're interested in upgrading your skills, we have links to resources in the show notes.



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