Foresight: The CPA Podcast

Episode Three: Are Financial Statements Dead?

David McGuffin: Hi and welcome to Foresight: The CPA Podcast. A podcast produced by CPA Canada that explores the future of the accounting profession. I'm your host, David McGuffin. In each episode, we'll reimagine what CPAs do, how they do it and the impact they have around the world. This podcast is part of the Foresight Initiative from CPA Canada aimed at setting a new strategic direction for the Canadian accounting profession. So let's get started.

So far in this podcast series, we have spoken about the many ways CPAs are being challenged to think in new ways about their roles and the skills they need to thrive in an ever-changing environment. Few things highlight the scope of the change that is taking place, quite like the shifting value of financial statements for investors. Financial statements have long been at the foundation of investment decisions, but increasingly investors can access a myriad of financial tools and alternative sources of information. It's becoming a crowded, fast-moving and at times chaotic space. And the question is, can financial statements find a role in the new information ecosystem or are they on their way to becoming relics of a bygone era? We put that question to Jon Lukomnik. He is executive director of the Investor Responsibility Center Institute and is managing director of Sinclair Capital. His most recent book is "What They Do With Your Money."

Jon Lukomnik: Financial statements are not necessarily on their way to becoming relics of a bygone era. I think the way investors have changed is a huge topic. First, we have seen a shift from markets dominated by retail investors to markets dominated by institutions. Clearly, as an institution, you have different ways to access data than individuals did. Secondly, you've had computerization with low-cost computers being around since the early 1980s that has enabled more calculations and more data crunching. Third. You've had the rise of the Internet and the rise of social media, which just exponentially exploded the amount of information around. So, where financial statements used to be the beginning and end, I would say, the alpha and the omega of individual investors research, maybe they read a newspaper article or a stock tip paper, maybe they went into a store and looked at the competitor's products, but basically, the information they had was financial. And the things that produced were property and equipment. You know, if you had a factory, the factory's going to continue producing. We've seen a change where you can have, you know, multibillion-dollar companies spring up overnight by writing a piece of code. We've seen massive amounts of data accessible through the Internet and able to be parsed to some extent through computerization.

Jon Lukomnik: And you've seen the institutionalization of the markets so that there are really intelligent people with lots of resources to throw at these issues and dealing with them. So it's been a multiplicity of reasons from the change in the nature of business, from industrial to information, change in the nature of investors from retail to institutional, change in how we get data electronically rather than newspaper or magazine, and change in our ability to parse data with the advent of low-cost computerization. All those things have caused financial statements to stay the same in terms of value, but all the other information around that explode. And when you do the math, that just makes a financial statement less valuable because it's less of the totality of the information.

I think the profession is at a crossroads. You know, a few years ago, I was lucky enough to write a white paper that was had a fairly large launch in London. I wound up speaking at the House of Commons, but the launch was at the Worshipful Society of Weavers. Exactly, what it sounds like, people who wove cloth, and this was one of the medieval guilds, and if you ever go into the Worshipful Society of Weavers, you realize they were at the heart of the medieval economy. We don't think of it that way. But these incredible tapestries on the wall, any one of which probably cost more than my house. You know, huge, gilded ceilings, huge banquet rooms in the heart of London. At some point, weavers fought back against mechanization and progress. And I'm not saying whether that was right or wrong. But the world passed them by. If all accountants do is to continue to compile. Value realized transaction date, financial statements, they will continue to have a profession much like weavers, continue to have a profession, but they will no longer be at the heart of the economy. They need to develop these new skill sets. They need to talk about value creation, not just value realization. They need to understand how financial statements link to the broader universe of data, both structured and unstructured, that's out there. And if that happens, the centrality of the profession to the economy will continue. But if not, then, unfortunately, they could become the weavers of the 21st century. Still a profession, still, you know, relatively useful, but not central to the world.

David McGuffin: That's Jon Lukomnik. He is executive director of the Investor Responsibility Center Institute and is managing director of Sinclair Capital. One of the things driving this flood of financial information is the rise of artificial intelligence. But does this necessarily mean AI is a threat to the rule of CPAs? Cathy Cobey has thought a lot about this. Cathy is the EY Global Trusted AI Advisory Leader. So, Cathy, thanks so much for joining me today.

Cathy Cobey: Thank you, David. Really happy to be here.

David McGuffin: So how are organizations using AI?

Cathy Cobey: You know, we're starting to see artificial intelligence being used all across the organization. So, you know, there certainly is a lot of data that is housed within the finance organizations. But we are seeing it, you know, across the customer-focused areas, manufacturing, the inventory groups. And so, you know, AI is finding wherever there's any kind of transactional activity, there is the use of AI. And it is being used in two main areas. One would be to create new

insights out of large sources of data. The second would be looking for anomalies. So, you know, can we get better insights into how to better serve our customers, how better to optimize our different hardware, software networks, but also to, you know, where can we find where things are going wrong and more quickly identify those kinds of opportunities?

David McGuffin: So, Cathy, I wonder if we can go through some of the areas where you see risks and let's start with design risks.

Cathy Cobey: Yes, I think, you know, thinking about risks of AI really should be done at the design stage because, you know, once you train and model an AI, it's so much harder to change it after the fact. And the risks are quite broad. There's been a lot of conversation about the inherent biases within data and how that can then create bias into the outcomes of algorithms. There are risks about do we really fully understand the decision framework that is being used by the AI because they're not a rules-based system. We're not preprogramming them to make a decision based on some predetermined rules. Instead, we're using probabilities. We're asking the system to, every time it goes to do an outcome to kind of reshift its statistical decision framework. And so that creates some risks that you know, we're not used to managing because we're used to humans taking those kinds of judgments and subjectivity and trusting that in the broader context of our human cognitive abilities, that we'll be able to manage those risks. But within AI, we're now trusting it to a system. And I think that's what's raising a lot of the concerns, is that we don't have enough experience yet with the technology to really understand when it will fail. You know, we know humans enough to kind of have a sense of when we're going to fail. We don't necessarily know when AI is going to fail, and it fails in different ways than we're used to. And so I think that that's leading to a lot of risks around accuracy and, you know, just the ability to trust in the outcomes.

David McGuffin: So when you say AI fails and that it fails differently than humans do, what do you mean by that?

Cathy Cobey: You know, so, you know, I think we have to think about it differently. You know, AI doesn't tend to kind of see context around its data points. It tends to optimize. And so, most AI engines are built as optimization engines. So it tries to come up with the least amount of data it needs in order to come to its conclusion. But sometimes, that can actually create it to make the erroneous decision because the data it's relying on is in error, and it doesn't have that broader context in order to second guess itself like a human would. So probably the best example I've ever seen is looking at an image and trying to decide whether an image is, you know, what it is. And what we've seen is that, you know, if you have a regular image of just over a thousand pixels, the AI agent will actually, as you can see, like it's got a bunch of dots it will look at and will only pick certain pixels that it looks at, you know, then decide what it is. And there are some researchers that we're able to change only one or two pixels, and we're able to fool the algorithm into actually thinking that a house was actually an airplane or a teddy bear was a gun. Like those are very significant differences that no human would ever make because we wouldn't just rely on individual

pixels. We would look at the overall context of the picture. And so that's an error that I make. Another error that we've seen is that sometimes we don't realize what information it is relying on. There was a second set of algorithms, again, you know, a similar type of image detection, and both algorithms had very high accuracy rates. And when they went and actually back-tested to what information they used, one algorithm did, as you would expect, looked at the different pixels. The second, however, had found that each of the pictures had a tag at the bottom that tagged what category of picture it was. So that algorithm went down to the bottom, said, well, the category is a horse, so it must be a horse. So as you can imagine, as you go to move each of those two out into production without image data or without tagged data, you're going to find that actually one is going to work really well. The other one's going to fail completely. And so that just kind of goes to show just how difficult it can be to train these in a way that they're going to actually operate in a more uncontrolled environment than you're expecting.

David McGuffin: That's fascinating. Not as good at the big picture, quite literally then, I guess. So finally, what about performance risks?

Cathy Cobey: Yeah, so performance risks are that right now we're still dealing with narrow AI. So it's been defined to work within a narrow set of conditions and boundaries. It's not like a human which would be considered more having general intelligence where we do have the capability of being flexible and working from one situation to the next and can draw on all that kind of inference, knowledge in order to operate under those conditions. Whereas I think with AI right now, it's been purpose-built to work in a very narrow kind of use case. And so what we're finding is that that sometimes can affect its performance. You know, certainly, as it starts to move out into production environments and have to now operate with a much, much more diverse set of variables and data. And, you know, accuracy can be, you know, significantly affected by that.

David McGuffin: So, having detailed all these risks, how do we develop trust in this new tool?

Cathy Cobey: Well, I think the first part is really to really understand how it's different from some of the traditional technologies, like what are the main differences between a more rules-based system versus algorithmic probabilistic systems? And then how can we devise the right governance structure? There's a lot that exists right now and entities to provide governance and controls over these systems. But they do need to be modified, and they may need to be supplemented. And it's really important to have some good data science expertise in order to really fully appreciate these risks. And but, you know, I'm really bullish, like even though I spend a lot of time talking about the risks and how it might go wrong, I am very bullish on the technology because I think it can provide a lot of insights and is going to allow us to really get a lot of informational value out of all the data sets that, you know, are just proliferating right now across all of our different interactions.

David McGuffin: So we talked a bit about design earlier, and you hear the term a lot, trust by design in reference to AI, also in the Internet space. And EY uses that term a lot as well. What does it mean?

Cathy Cobey: Well, you know, trust by design was actually originally derived out of the concept of privacy by design. And the two are quite closely interrelated. And really, what it is, is that you want to be thinking about how are you going to generate trust right from the very beginning stages of your project. And so thinking about what is going to be some of the potential stakeholder impacts, what might be some of those unintended outcomes, and how might you mitigate for those and build all of those into your requirements for the system? You know, really spend a lot of time at that design phase challenging as to what could go wrong and how then might we mitigate that? And what are some of the social and ethical implications of these systems and really have some robust conversations with a diverse set of people? Like what I think right now is concerning is that so many of the people working on AI think the same. You know, like they have had the same background. They have the same priorities and objectives and the same knowledge bases. But what we really need to do is bring a lot of diversity of thought to these conversations so we can get a much larger inventory of, you know, some of these what can go wrong statement so that, you know, we're really designing, you know, all of those elements into the AI algorithm right from the very beginning. So how can we sure that it's safe and it's reliable and it's unbiased and it has the right level of explainability. So I think that's really what's important there.

David McGuffin: Let's talk now about the role of CPAs specifically in all of this. What's their role in offering insurance and securing trust in this area?

Cathy Cobey: Well, I think the very first role that we have is over data governance and integrity, you know, CPAs have for a long time, I think being the steward of data, we have, you know, a lot of experience in knowing how to create governance and control systems so that you can trust into data. And then how can you build the analytics over top of that data so that you can derive those insights and create informational value? And how do you build the right systems so that you can get the right data at the right time that's needed? And so, I think that it's really important for CPAs to really step into data integrity. But I think what we need to do is we need to expand what we consider the important data sets. So we have to move beyond just the financial and capital type of data and move into customer data. And, you know, some of the unstructured data, like some of the image data and some of the social media data. And so, you know, I think there is a really important role for CPAs, but we have to understand that we've been kind of defining fairly narrowly in regards to what we thought was kind of in our purview of influence, and I think we really need to expand that to kind of a much bigger set of data sets. And think about how we can, you know, leverage our current foundation of knowledge around governance and controls and extend it across the full organization.

David McGuffin: So some people might think it's self-defeating to facilitate and securitize entry into their area of expertise. It's a bit like a bus driver training autonomous driving systems to take over their jobs. So, I mean, how do you see that?

Cathy Cobey: Well, you know, if you take an autonomous vehicle, for example, like, I get quite bored after, like, a four-hour drive, you know, I don't mind putting on the, you know, the cruise

control. And so we need to take that same analogy to AI and think about why would we not want to try and get, you know, and automate some of those more routine tasks. I don't want to spend a lot of time really going through a bunch of data sets. I'd much rather get, you know, those rich insights out of the data and then spend more time thinking about what does it mean, you know, how should I react, you know, how can I leverage this information? You know, how can I increase the profit of my organization, or how can I reduce costs or improve customer experience? Like, I'd much rather spend my time at that higher-level cognitive thinking than in the like, lower level of like trolling through data. And so I think that's where it's really exciting for me, is those opportunities for CPAs to really step up our involvement in those higher-level cognitive functions that and leave AI to do kind of the more lower-level stuff.

David McGuffin: It's much more about connecting with the client, I guess in some ways. And like, what's the value-added for the client.

Cathy Cobey: Exactly. And you know, a lot of people think about AI as just part of that broad automation set of systems to make things more efficient, cost-cutting, you know, reduce full-time equivalents. But really, AI is actually a technology that's best designed at that top line to be thinking about how to create more personalized customer experiences, how to better, you know, create more personalized ways of which to operate your businesses. And that's where the real opportunity lies with AI.

David McGuffin: What do CPAs need to do then to ensure that they are set up to thrive in this environment?

Cathy Cobey: Well, I think the very first thing is really to educate themselves about what artificial intelligence is, you know, what its benefits of. And then the second would be to really find where within the organization they're already starting to use some of these technologies. It doesn't tend to start in the finance organization. So, but it does tend to start more in the operational areas. And so to really start getting involved in those type of projects and what's most likely going to happen is that there's a need for their functionality and helping to share, like I said before, the data quality and, you know, the governance and control structure. But they'll also find is that once they get embedded into the projects, they're going to see that there is a downstream impact to the finance statements there. There is a downstream opportunity to be taking that data and being better understand the value opportunities within the organization and to be able to really be able to work with that and to distill that and be able to kind of integrate that into the strategy of the organization in the way that they report. Because, you know, a lot of the reporting that CPAs do right now has been more financing capital orientated, but there are so many other value categories within an organization. So, you know, can you get a better idea of the human value that you have within your organization or the customer value that you have in the network of customers that you have and the strength of trust and loyalty that you're able to generate with that customer base. And so that's where I think, you know, again, there's this such an exciting opportunity for CPAs to kind of really expand the way that they think about the value beyond just the, you know, the core

financial metrics.

David McGuffin: Well, I think that's a hopeful note to leave this interview on. Thank you so much, Cathy. It's been a real pleasure talking to you today. I learned a lot.

Cathy Cobey: Thank you, David.

David McGuffin: Cathy Cobey is the EY Global Trusted AI Advisory Leader. Foresight: the CPA podcast, is created by CPA Canada in partnership with PodCraft Productions. For more information about the Foresight initiative, head to foresight.cpacanada.ca. So until next time, I'm David McGuffin. Thanks so much for joining us.