Foresight: The CPA Podcast

Episode 5: How can CPAs protect public interest in the AI era?

Jean-Sébastien Marier: Welcome to the Foresight: a CPA Canada podcast, exploring the future of the accounting profession. I'm your host, Jean-Sébastien Marier. In each episode of this series, we'll try to rethink what CPAs do, how they do it, and the impact of their roles around the world. This podcast is part of CPA Canada's Foresight Initiative. A project that aims to provide a new strategic vision for the accounting profession in Canada. Whether you are an accountant or not, your voice and ideas will help redefine the future of the profession.

In the previous episode, we looked at artificial intelligence and its impact on the accounting profession. As we saw, artificial intelligence is neither truly intelligent nor truly artificial. Rather, it relies heavily on data that is generated by humans. And professional accountants are at the forefront of managing that data.

In Episode 4, we heard from Marc-André Paquette, Director of Professional Transformation and Special Projects at the Ordre des CPA du Québec. Here he is again. He explains some of the ethical, professional and social dimensions of artificial intelligence and big data.

Marc-André Paquette: You can't talk about artificial intelligence without talking about ethics. Often, we will talk about intelligence, the ethics of AI. Currently there are various discussions about how we train machines. Because as you know, machines, artificial intelligence systems, have to be trained. So, there is an algorithm that is given data and the algorithm trains itself, discovers the patterns, etc. So, the choice of data used to train an artificial intelligence is of paramount importance.

Because history must direct the algorithm to make its future decisions. There have been cases or examples where past decisions, historical decisions, were not at all valid in the world in which we live today. So, if we take decisions that were made in 1960, 1970, clearly, it's another social context, another economic context, where the notions of social impacts or environmental impacts were not present in the decisions.

That is currently the case. We have to be careful. Ethics are very important in the training or configuration of artificial intelligence algorithms. And the CPA profession has always been accustomed to working on ethical issues, to keep this hat on. We know that artificial intelligence will not be able to make ethical decisions, will not be able to decide whether it is good or bad, and will not be able to have that kind of intelligence, at least not for the time being.

So, I think that the ethical issue is clearly something that needs to be addressed, or especially when we talk about artificial intelligence. Yes, I was talking about training it, but even using the data, I was talking about taking the recommendation of artificial intelligence, not questioning it and applying it. Is this a way of doing things that we want to support? That is not necessarily the case. There is still room for an individual, a professional judgment while using this tool.

Very few people know that there is a lot of work to do before using artificial intelligence. We rely on data to make predictions, to make machine analyses as accurate as possible. What this means is that it requires a fairly significant effort upstream. So, before even passing the data, the information into the intelligent system, we have to make sure that the database is error-free, is representative of the history or is representative of what we want to have as well.

Clean too.

So there's a lot of housekeeping, and we accountants like that. We like that. Cleaning up the data, before using the machine as such or before using the intelligent system. Often, people will reduce the time spent on data preparation, to quickly jump to the actual analysis, they will be results. Now, I was hearing recently that almost 80% of the time that was supposed to be spent using artificial intelligence, was spent upstream, was spent before even the analysis.

Because ultimately, the system could only produce analyses if the data that was used was of high quality.

We often talk about garbage in, garbage out. This has always been the case in the accounting world. We know very well that if an analysis is done, whether by a machine or by a human being, if the data on which it is based is not valid, not relevant, not adequate, the analysis will clearly be distorted and will not even be usable. So I think that's already a pitfall. Strangely enough, we already knew about this pitfall, because it was already present before the arrival of certain technologies.

But the time spent refining and refining the data is a very important issue, especially in a world where, until now, there is more and more data. It is less difficult to find the data, but more difficult to work on it upstream.

Jean-Sébastien Marier: That was Marc-André Paquette, Director of Transformation of the Profession and Special Projects at the Ordre des CPA du Québec. Professional accountants have an important role to play throughout the data value chain. By this we mean the process of collecting, managing and analyzing data. I'm discussing this with Michel Girard. He is a Senior Fellow, or if

you prefer, a Senior Fellow, at the Centre for International Governance Innovation. Michel, thank you for being with us today.

Michel Girard: My pleasure. Jean-Sébastien, thank you.

Jean-Sébastien Marier: My first question is really about your vision for the accounting profession in the context of the current pandemic. In short, you said in a recent speech that the pandemic has been a great accelerator of the digital shift. In concrete terms, how has this manifested itself, as far as the accounting profession is concerned and more specifically in the areas of artificial intelligence and megadata?

Michel Girard: All CPAs who work in organizations, whether in the public, private or not-for-profit sector, were called upon to respond to the pandemic. We ended up with people working from home. Data is now transmitted through servers, which are in the cloud. Some people are sick, and we have to replace them with other mechanisms to automate the way we respond to customers. Businesses have had to turn to digital commerce to be able to keep their customers.

So all of this forced the administrators, including our CPAs, to rethink their model and find new solutions to the problems, which were urgent. That's how we see it in our committee on governance management. We see that CPAs have a very important role to play in the digital transformation of businesses.

Jean-Sébastien Marier: In the previous episode of this podcast, we saw that artificial intelligence is, in fact, neither truly intelligent nor truly artificial. One of the things we have to do is provide it with data to train the algorithms. Can you talk briefly about the role of CPAs in managing the data value chain? We're talking about collection, sharing, the information that can be derived from it and communicating that information. But in concrete terms, what is the role of CPAs in all this?

Michel Girard: The chain itself is composed of three links. When we think of artificial intelligence, we tend to put it all together in a big box. So, we have to separate that. The first link in the chain is collection. The data collection and analysis comes later. There is a certain quality that has to be attributed to the data. CPAs have been working for hundreds of years to manage financial information. The same principles apply to data management, which will be used later in terms of analysis.

This is the first link, the collection of data.

Give it its attributes, make sure it is of good quality.

The second link in this chain is data access and sharing. It is very clear that if anyone can access all the company's data, there will be problems. Therefore, systems and controls must be established to ensure that the regulations, for example, on the protection of privacy or your contractual obligations to this company, are respected.

Once again, the role of the PACs is extremely important in establishing, implementing and verifying, through systems and controls, that the regulations are protected. There's a charter that governs the activities of the CPAs, the protection of the public interest is very important in their work. So this is a driving force, which is essential when we think of data management.

The third link in this chain is analysis. So we can have analysis by people, that's obvious. We also have artificial intelligence, and we have other mechanisms for analyzing automated data. One role for CPAs is to ensure that ethics and transparency are very important principles, very important values, that we want to add to the use of artificial intelligence. We have to make sure that someone is in charge of it.

And I think that CPAs, because they deal with values, in their work for financial information, can transpose these skills, if you will, at the third link in that chain.

Jean-Sébastien Marier: And when we talk about the role of CPAs, as you mentioned, there is a role of control, of compliance, of ensuring that the rules are respected. But in the data management chain, there are other players, we can think of data analysts, system engineers. So, how do CPAs interact with these other players, what value do they add to the process?

Michel Girard: Jean-Sébastien, that's a very good question. Because the deliberations that we have in our CPA Data Management Committee, it's not about replacing or competing with mathematicians, who create algorithms or engineers who collect data, and then make sure that the data is transmitted properly. It's adding, it's adding value. So, we see this on three levels.

The first intervention that CPAs can make is at the business level. Make sure you have the right digital transformation strategy. You know, artificial intelligence, that's one of the tools in your toolbox. If you want to transform your organization, from an analog organization to a digital organization. There are plenty of tools in that box. So you have to choose the tools. You have to pick the problems that are most important to the business. You have to have business plans that are adapted to that.

That's the first role we see at the level of making sure that companies take the right steps, take the right measures at the right time to initiate, if you will, their digital transformation. So, strategy.

The second is governance. We are talking about engineers, people who develop software. These people have not been trained to develop and implement systems and controls. So, a data management policy, it takes one when you're doing this digital transformation. And we don't see in the ecosystem, if you will, new professions, we don't see anyone who has been trained to do that.

CPAs, on the other hand, do. They do it every day for financial information. So, it's a role they can play, transferring their skills to the management level, if you will, the data management policies in the company. Downstream, in terms of analysis, there's a lot of value in that.

Does an algorithm make the right decisions? Is an algorithm neutral? Can an algorithm be said to make ethical decisions? Are there any harms in the data or It takes a third party to look at that. And again, we think that CPAs have an important role to play in that. I'd like to conclude with this point, Jean-Sébastien, it's that artificial intelligence, and digital transformation, it's not magic.

These are formulas and protocols. These are mechanisms that are replicated from one company to another. So you have to stop being intimidated by that. You have to roll up your sleeves and add value to the process. Be part of the teams and then demonstrate that people don't have all the solutions. But CPAs certainly have some of the solutions to this problem.

Jean-Sébastien Marier: Speaking of solutions to current problems or issues, in your opinion, well, there has been an acceleration of this digital shift related to the pandemic. There were issues that were faced, and solutions were found. But now things are slowly returning to normal, if you can call it that, what do you think are the priorities that should be addressed, specifically in the case of the accounting profession, to better prepare, perhaps, for a future where data and artificial intelligence will be more and more present?

Michel Girard: Well, look, I think we need to get the framework in place. So the CPAs, right now, as employees are starting up again, will start again soon to go back to work, a few days, weeks. It's time now to ask the question, how do we get started or keep the momentum going for this digital transformation? CPAs have a very important role to play here in determining and helping shape the digital transformation strategy. So if our CPAs, our members go to the CPA Canada website, they're going to find articles and materials to help them figure this out.

Once the digital transformation strategy is in place, it will take a policy to manage the data. Again, CPAs have an integration role to play. There's documentation on the site to help them get their heads around that. Should the data be put, should the data be kept on servers located in Canada, for example? Or can we allow companies to go around the world to do business in the cloud?

These are very important issues for some companies in Canada. There is the question of how do we ensure that our data remains ours? How do we ensure that the intellectual property of the data remains with us? These are integration issues. These are issues that must be applied equally, uniformly, across companies. So, data governance policy. We have information on the site about this.

And downstream, again, analysis, ethics and all that. We have documents that could help CPAs to add value to these issues, in terms of ethics and values. They are used to doing this and I think they can add to it once again. Present a new angle to their partners, to the members of their teams. So that, in the end, the company is successful in its transformation objective.

Jean-Sébastien Marier: And you talk about data governance. There's even a choice to be made, decisions to be made ethically, whether to include gender, age, ethnicity, for example, if you have an algorithm that's going to make decisions about loans or various services that you would like to provide to the population. What is, who has the ultimate responsibility, in short, in that context, within the company?

Michel Girard: But you know, 95% of businesses in Canada are small businesses. We call them small, medium-sized businesses, with fewer than 10 employees. So, in these companies, within these companies, we don't have what we call in English a Chief Data Officer. We don't have a Chief Information Officer. There are no positions dedicated to these issues. We think that CPAs can add value for small businesses, and in addition to their function, if you will, of managing financial statements, they could finally add value at that level.

And we think it's important to do it for all companies, not just the big ones. But it's going to take some tools. That's why CPA Canada is currently making the documentation public. We also provide training. If you go to the website, you'll see that we can provide training to help our CPAs add that value. And I think that eventually, this will be part of the body of competencies that are required for new CPAs.

It's coming, a few more years, I think we're going to see more evolution at that level. So, it's a learning curve for everyone. But there are tools, there is training and certification coming, to help our professionals get ahead of this. Because otherwise, what will happen, when we think of artificial intelligence, if there is no one there, a neutral third party, who looks at all this, we will have prejudices that will, which will end up in the algorithm as such.

Then, in addition, there may be damage to the data as well. It's going to take a lot of people within companies to do this cleanup work. There's an article coming out soon on data collection. How do you make sure that it's catalogued, that it's clean, that it's complete, that it's neutral? CPAs, again,

can play an extremely important role here. Then there are holes. It is certain that there are gaps in companies. These are not the skills that we are currently seeing emerge from our universities.

Jean-Sébastien Marier: In short, if I understand you correctly, data and artificial intelligence are not ends in themselves, they are tools. There are processes surrounding them and we will constantly have to learn new things and put in place new policies and infrastructures to be able to use them properly and professionally.

Michel Girard: Absolutely, Jean-Sébastien, it's very clear. We are not at a level of maturity comparable to what we see with financial information. There are practically no regulations on this. We have certain obligations in terms of privacy, protection of privacy. But the standards, the certification, the verification. It's still in its infancy. But that doesn't mean, even if it's embryonic, that doesn't mean we shouldn't start doing something. The skills of CPAs are so easily transferable from one area to another.

We're surprised when we have a conversation, because sometimes we get specialists in digital transformation, and they ask us what a CPA is doing here. After half an hour, three quarters of an hour of discussion on how we handle financial information, it's like a eureka moment for them. They say to themselves, well yes, we're not going to reinvent the wheel, it already exists. The three main roles we see for our CPAs.

I repeat what I said earlier, strategy, governance policy, then also help to fill this trust deficit that people have towards artificial intelligence, towards platforms. The CPAs have the tools, and then a charter that could finally make the difference between a world that scares us and a world in which we trust.

Jean-Sébastien Marier: On that last note, Michel Girard, thank you very much.

Michel Girard: A pleasure.

Jean-Sébastien Marier: Michel Girard is a Senior Fellow at the Centre for International Governance Innovation. Foresight is a podcast produced by CPA Canada. For more information on the Foresight Initiative, visit foresight.cpacanada.ca.

I'm Jean-Sébastien Marier, thank you for listening. Until next time.