

FORECAST 2024



From AI to Web3 to blockchain, and the scams and hoaxes that accompany each one, the future of finance is anything but clear. To help you navigate the year ahead, here's a look at where business is going and how it's changing.



Embracing the AI advantage

Industry experts forecast the future of generative AI in accounting and business

By Coleman Molnar

The 'robots' have come for our jobs enough times at this point that we really should know to simply get out of their way. After all, they've taken over the more arduous and mundane tasks and have assisted the human workforce, boosting productivity at those organizations that embrace them.

Generative AI isn't likely to be any different. In the now-famous words of Karim Lakhani, professor of business administration at Harvard Business School, "AI is not going to replace humans, but humans with AI are going to replace humans without AI." And seeing as it's here to stay—just ask Siri—those professionals also looking to stick around should probably be paying attention.

The fall of prompt engineering

The job title prompt engineer has sprung into prominence over the past year as organizations look

to capitalize on generative AI's full capabilities. Prompt engineers are individuals who create and refine instructions for generative AI programs—and they've recently been enjoying something of a moment. But Zohaib Akhtar, senior manager of Omnia AI, Deloitte Canada's AI Practice, says those days may be numbered.

"The models will no longer need that sort of consistent prompt engineering, or that sort of an input to provide us with outputs," he says, giving the example of a generative AI program sourcing information from government regulations on trade programs for businesses. Today, prompt engineers might enter a series of directions to first find the appropriate regulation, then summarize it, then draw the key insights from the summary, and so on. "Instead of doing these five different prompts," Akhtar explains, "I could simply say, 'Give me the most important regulation' and the system would be smart enough to now know that in order to get to that stage, I need to first summarize, then I need to look at the key themes, then I need to synthesize further."

A new career path for knowledge workers

As the national transformation leader at PwC Canada, Chris Mar believes that knowledge workers will continue to benefit from AI developments, but how they work will be key to think through.

"A lot of the lower-order cognitive tasks are going to be accelerated," says Mar. "Knowledge workers who harness this technology are going to create

PHOTOGRAPH BY GETTY IMAGES

a whole lot more output, but how are employees actually going to learn these skills and acquire these new capabilities?”

Today, says Mar, most companies use an “apprenticeship model” in which a new hire learns new skills on the job from both human and technical resources. “If a lot of these lower-order cognitive tasks are now being automated by technology, how are they actually going to know enough to make use of the tool in an effective way?” That could result in a very different early career path for a lot of young knowledge workers, thanks to generative AI.

‘Blurred Lines’ between AI and generative AI

As we all begin to use the various forms of artificial intelligence, Deloitte’s Akhtar says we’ll soon start to see more of a “blurred line” between the two currently distinct forms. “At some point, it’ll just be referred to as AI,” he says. “And that is probably the best way to proceed, because obviously generative AI in combination with AI will continue to evolve, will continue to improve. And it’ll probably either be just referred to as Gen AI or AI, but... it’ll potentially leverage the best of both worlds.”

The productivity arms race fallout

With AI being harnessed by an increasing number of organizations in a multitude of ways, productivity has been skyrocketing. But what will brands and businesses do with those suddenly-available hours? “Let’s say you saved 10,000 hours out of your business by deploying this technology,” says Mar. “Are you going to downsize? Or are you going to reinvest that newfound capacity—those people—and redirect them to do something of higher value? I believe the better companies are going to think about how they can strike the balance.”

The evolution of the CPAs role

While Mar notes early career paths will change, Taryn Abate, CPA Canada’s director of research and thought leadership, believes that change is accompanied by a continuously evolving future role for CPAs. “Finance professionals and assurance providers are increasingly incorporating analytics, RPA and AI into their processes; this will only continue as the accessibility to and power of AI increases”. CPA Canada and the American Institute of CPAs (AICPA) are developing a series of resources on the evolution of AI and the professional accountant’s role. “This series aims to build an understanding of the progression and adoption of AI in professional accounting and audit and explores the role of the CPA in the responsible development and use of AI.”

Michal Šimečka, leader of the Progressive Slovakia party



Future of Cons

A catalogue of the cons, frauds and scams to come

In the ever-evolving business landscape, a new year heralds not only promises of fresh opportunities but also a continued cat-and-mouse game between scammers and those striving to safeguard their financial interests. As we explore the forecast of trends for the upcoming year, it’s imperative to shine a spotlight on the dark underbelly of these advancements—the world of scams.

P2P threats

Peer-to-peer transactions are quick and convenient payments made in real time, which makes them a target for both scammers and fraudsters. While many popular P2P services like Venmo, Zelle and Cash App are unavailable in Canada, that may change with a push toward a more competitive Canadian banking sector. The closest we have is our trusty Interac e-transfer (although it uses our financial institutions as the go-between in these transactions).

The concern with some American P2P services, should they make their way here, is their scam and fraud policies. Zelle, for example, has a zero-liability policy when it comes to fraud perpetrated on a user, but no such policy exists in the case of authorized push payments (APPs), where a user is scammed into sending money to a bad actor.

9 per cent of P2P users who use it at least once per week have been the victim of a scam

Sound familiar?

In a recent McAfee study of 7,000 participants, one in four people have, or know someone who has, experienced an AI voice scam. And of those people, 77 per cent lost money as a result. Like most tech-based scams, advancements in AI not only help make this easier but a lot faster, with some voice-cloning technology requiring only five seconds of audio to be able to replicate a human voice. The implications of its misuse stretch far beyond dollars and cents, as voters in Slovakia found out. Two days before the national election, an audio recording of Michal Šimečka, leader of the liberal Progressive Slovakia party, leaked on Facebook apparently discussing how to rig the election through buying votes. It was quickly debunked by Slovakian news agencies, although Šimečka still lost the election in a tight race.

Seeing double

As the number of our online purchases proliferate as fast as our social media accounts, so, too, do the chances of our personal information leaking. This form of fraud can impact consumers and financial institutions alike, with fraudsters applying for credit using these fake identities. They accumulate debt and often default on payments, causing substantial financial losses to banks and lenders. The losses can result in increased interest rates or fees for legitimate customers to compensate for these losses.

According to an Equifax Canada report, synthetic identity fraud made up for **68.5 per cent** of all fraudulent credit card applications in 2023

Malicious intent

We’ve all become familiar with malware and ransomware threats. And AI is increasing the volume and threat level of attacks. In 2022, ransomware payouts amounted to less than \$500 million, as reported by the blockchain analysis firm Chainalysis. However, the narrative shifted in 2023, as victims shelled out up to \$449.1 million within the initial six months. With would-be hackers now looking to ChatGPT to generate codes to launch cyberattacks, these numbers are more likely to get worse before they get any better.

340 million people have been impacted by data breaches and leaks between January and May 2023

A cyberattack happens every **39 seconds**

THUMBS UP THUMBS DOWN



SUPERMARKET SOLUTIONS

The Competition Bureau released its study on Canada’s retail grocery market after calls for change from consumers feeling the burden of food inflation. The study lays out some recommendations to the government for increased competition to combat fast growing prices.

EV RACE SWITCHING GEARS

BYD overtook Tesla as the world’s leading electric vehicle manufacturer in 2023. Combined with Toyota’s 2027 plan for a 10-minute charge and 1,200-kilometre-range EV, it signals increased competition and positive eco-impact.



NFT COLLAPSE

Non-fungible tokens, once the hip trend in the digital assets space, have now been declared worthless with 95 per cent of NFT assets declared unprofitable investments in a 2023 report.

X DOESN’T MARK THE SPOT

Ad revenue on X, formerly Twitter, dropped at least 55 per cent year over year each month since Elon Musk purchased the social media platform in October 2022. This comes on the heels of controversial name change, which some experts call a mistake as it undoes over 16 years of equity and brand recognition.

FACE VALUE

We waited nearly a year to find out X/Twitter’s value after Musk bought the company for \$44 billion, and now there’s an answer. X employees were granted equity in the company at a valuation of \$19 billion, a 55 per cent drop.

CLEANING UP

In a move sure to simplify and declutter, Apple is switching to USB-C charging for all its smaller electronic products, from smartphones to the Apple Pencil. It will not only eliminate charging cable confusion but will allow Apple to abide by European legislation aimed at creating a universal USB-C charging standard (and to pre-empt similar potential legislation in North America).

IN THE LEAD

ChatGPT has become the leading representative of what AI can offer to the common person—a conversational AI model that answers questions and can quickly generate long-form text. Curiosity and interest helped ChatGPT reach over 100 million active users within its first two months, the fastest-growing consumer software application ever.



FRESH COAT OF PAINT

Amid a year filled with controversies, Indigo and Loblaws have appointed new CEOs, Heather Reisman and Per Bank, respectively, in an effort for both Canadian empires to move past recent turmoil. While it’s too soon to say whether the new leadership has paid off, all eyes will be on both companies in 2024.

META’S PLAY

Meta’s foray into the generative AI world adds a unique twist by partnering with celebrities to “play and embody” the characters of different AIs. Snoop Dogg is Dungeon Master, offering choose-your-own adventure fun; Tom Brady is Bru, the sports bro; Charli D’Amelio is Coco, the dance enthusiast. Will this be the successful fresh approach on the new technology or a blunder in the human-AI relationship in the digital age?



Web3 and the blockchain advantage

Web3 proves that the future of digital currency on the Internet is as easy as 1-2-3

By Alyssa Schwartz

Last summer, as inflation soared 124.4 per cent over the previous August, Argentinian investors began flocking to a new type of cryptocurrency, one that's linked to the U.S. dollar.

With their wild fluctuations, Bitcoin and other digital currencies are still often viewed as fringe by many investors. But according to Jonathan Mirarchi, a CPA and senior associate in tax digital enablement at PwC Canada as well as co-founder of Web3 Montreal, emerging currencies such as

USD Coin (USDC) represent a significant leap toward bringing crypto—and the entire Web3 ecosystem—into the mainstream.

“Because of the inflationary crisis, there are limitations on how much U.S. money each person is allowed to acquire due to limited liquidity,” says Mirarchi. “But because of crypto, Argentinians are actually able to buy U.S. dollars from a global market and hold those dollars in their own custody and not have to rely on the banking system to access it.”

It's an advance that propelled Argentinians to one of the highest levels of cryptocurrency ownership in the world—and a sign of what's coming in the Canadian financial sector (despite not sharing the same level of inflation), Mirarchi says.

“We're starting to see major institutions investing a lot of time and effort into these new products,” he says, citing PayPal USD, which launched last August, as one example. “It makes sense for a company like PayPal because they process a lot of global payments on a daily basis. What we're going to see as these new types of payments become common is they're going to decrease settlement times to near

instantaneous, they're going to decrease interbank transaction fees to near zero and they're going to allow for a global settlement of dollars with an efficiency we've never seen before.”

But stablecoins are just one of the Web3 advances Mirarchi believes will upend finance, investing and the work of accounting as we know it.

“Currently we live in the age of Web2, which allows us to both read and write on the Internet. Web1 was the Internet of the '80s and '90s that was read-only. Then in the 2000s and 2010s, we were introduced to Web2, which allowed us to interact. It gave us things like social media and e-commerce, which didn't really change the underlying systems, just how we access them. Online banking didn't change the way dollars are held in our bank accounts—it just gave us a platform to view our bank account balance or make transactions online,” Mirarchi explains.

“Web3 allows us to interact with assets in ways we weren't able to in the past. People are starting to wake up and realize they can tokenize other types of assets—real estate, bonds, securities—and that's leading financial institutions and banks to start building new products,” he says.

While mass adoption may still be a ways off, Mirarchi predicts change will feel “slow, then all at once.”

For CPAs, he predicts a steep learning curve—but he also believes the very nature of how Web3 works will resolve significant legacy challenges.

“Blockchain transactions come from a technology that is basically a public ledger,” he says. “Every transaction creates a trail that is auditable. Any individual is able to verify and confirm that money has actually been transferred on specific dates to specific people... With an advancement called zero knowledge proof, we will even be able to conduct private transactions and then prove certain conditions are true without having to reveal sensitive information.”

Although a lack of regulation might make Web3 feel a bit like the Wild West now, Mirarchi predicts this will change quickly as new innovations bubble up.

“It's like putting cars on the street. As they got more popular, we needed infrastructure, and speed limits and road rules,” he says. “There's a large opportunity for accountants who start preparing themselves. It's not a matter of if—it's a matter of when.” ♦

PHOTOGRAPH BY ISTOCK

Future Perfect

▶ **Technology and AI continue to transform the accounting practice. These futurists are tracking those changes and keeping an eye on what's to come.**

By ALI AMAD

IN 1982, the same year Ridley Scott's *Blade Runner* hit movie theatres with its bleak depiction of a dystopian future where humans and AI are almost indistinguishable, *Time* magazine made a prescient choice. Instead of naming their customary Person of the Year, *Time*'s editors crowned "The Computer" as "Machine of the Year," in a prophetic nod to the technological revolution that would soon reshape the world. That year, Jim Carroll, a 22-year-old freshly minted chartered accountant at Thorne Riddell in Halifax, found himself at the forefront of this transformation.

When Thorne Riddell brought in a TRS-80 Radio Shack desktop computer equipped with a modem, Carroll was hooked. He dived into the pixelated domain of bulletin board systems—rudimentary forums that were precursors to the World Wide Web. Through these forums, Carroll could almost instantly communicate with people as far away as New Zealand, an experience that inspired him to help create Thornet, an internal information-sharing network that functioned similarly to LinkedIn today. "I didn't set out to be a futurist," Carroll says now. "But the more I learned about the possibilities of online connectivity, the more I knew something special was happening, and the more I wanted to be part of it." In 1989, the same year the World Wide Web was invented, Carroll left to explore the potential of the Internet. His new career took off with the publication of the *Canadian Internet Handbook*, a national best seller he co-authored in 1994, which sparked a wave of speaking engagements across North America on the Internet's impacts and broader changes on the horizon.

Based today in Guelph, Ont., Carroll is recognized as one of the world's foremost futurists, a role that has undergone a significant shift in public perception in the last few decades. In the past, futurists were often associated with sci-fi fantasies of flying cars and human cybernetic enhancements, popularized by science fiction writers like Isaac Asimov or computer scientists like Ray Kurzweil, who famously predicted in 2005 that AI would merge with human consciousness by the 2040s. Fast-forward to 2024 and many of these once-outlandish predictions are edging closer to reality. Companies like Alef Aeronautics and Droni Aerospace are developing flying car prototypes, while Elon Musk's Neuralink implanted a neurochip in its first human subject this past January.

While those attention-grabbing stories dominate the headlines, a futurist's job is often far less flashy and far more practical—observing trends, interpreting data and helping industries prepare for what lies ahead. For Carroll, that means guiding businesses, including accounting firms, through rapid technological transformations, from AI to automation, as well as educating consumers on the growing threat of climate change. "Everywhere I go, every single client I talk to is overwhelmed

by the speed of change across every industry,” Carroll says. “Your car dashboard upgrades at the speed of iPhones—a car from 2018 is basically already a relic. The speed at which Pfizer brought its COVID vaccine to market was unprecedented in the pharmaceutical industry. Zara is now taking its fast fashion from the runway to stores within two months. And these developments are only going to keep accelerating.” To address these changes, Carroll preaches the same gospel to his clients whether they’re NASA astronauts, construction union leaders or Fortune 500 CEOs: “Get faster.”

Helping business professionals (like CPAs) modernize and be relevant was the main motivation behind B.C.-based entrepreneur Rocky Ozaki’s decision to launch his consultancy in 2016. He named his company the NoW of Work as a play on the buzz phrase “future of work,” because he believed that the “future” had already arrived. With experience in both traditional corporate environments and unconventional tech start-ups, Ozaki realized that every company, whether they liked it or not, was becoming a tech company. “It doesn’t mean everyone’s coding AI,” Ozaki says. “It means companies need to adopt the innovative, flexible approaches of the tech industry and learn to thrive in its hyper-evolving landscape to stay competitive.” Ozaki had been advocating for these ideas for years, but it took a pandemic for some of his clients to finally listen. In 2018, Ozaki advised one of his clients, a Canadian accounting firm, to implement remote work to boost productivity and financial resilience. They dismissed his suggestions as impractical and unnecessary—until the pandemic hit. “They said it would take one year for IT to make remote work possible for the entire firm. When they had no choice during the first global lockdown in early 2020, they did it in two weeks,” he recalls.

Since then, Ozaki has observed the pandemic act as a catalyst, forcing legacy firms to challenge long-standing assumptions about workforce management. On the business-facing side, across virtually every industry, Ozaki points to two key shifts that have accelerated over the past four years: hyper-personalization and democratization. “The accounting profession used to be about repeatability and predictability,” says Ozaki. “Now, clients want their experience personalized and tailored to their exact needs, and they won’t settle for anything less.” In addition, the monopoly firms once had on specialized knowledge is breaking down as technology makes information more accessible. As a result, CPAs have to offer more than just their core services to stay competitive.



Rocky Ozaki, founder and CEO of the NoW of Work, a business transformation firm focused on helping companies build future-proofed and resilient teams

For CPAs, this means more than just adopting new software—it means rethinking the entire client journey, from first contact to the end of the relationship. “It’s no longer about just delivering a service,” he says. “It’s about understanding the client’s goals and challenges, in order to provide a customized solution that goes beyond numbers.”

This democratizing and hyper-personalized transformation is a guiding force in the approach of Shayan Rashid, co-founder of the GTA-based accounting firm SRJ CPA. Rashid is part of a new wave of CPAs who are deeply intertwined with technology and perpetually seeking new avenues to add value to clients. “I wanted to build a fully virtual firm where my team could quickly innovate and adopt new technologies,” he explains. “At the same time, we are always adapting to meet clients’ growing needs. Clients nowadays are busy—they don’t

“They said it would take one year for IT to make remote work possible for the entire firm. When they had no choice during the first global lockdown in early 2020, they did it in two weeks.”

have time to come into the office or to gather documents and constantly answer questions. If CPAs are still doing things the old ways and not using the best technology, they’re going to easily be replaced by the firms that are using it.”

SRJ CPA stays ahead of the curve by employing five full-stack developers and even hiring a staffer solely focused on assessing new technologies that can be developed internally to boost the firm’s efficiency. Rashid also implements AI-driven tools across the board—tools that allow his team to focus on higher-level value-add work. “AI is already taking over data entry, bookkeeping and even parts of the audit process,” he says. “That frees us up to quarterback anything our clients might require so we can have a direct impact on their financial health. Our goal is to minimize the time clients spend on accounting, and to integrate all their financial needs under one roof.” Rashid’s firm offers everything from year-end accounting and back-office cloud bookkeeping to grant applications and strategic advisory, all through a tech-driven platform. “It’s not about being your parents’ accountant anymore,” he says.

ROBOTS BY THE CANADIAN PRESS, PORTRAIT COURTESY OF ROCKY OZAKI

But Rashid also notes the most significant challenge will be bridging the trust gap between AI systems and human expertise. “It’s the fact that humans will have trouble when it comes to the new tech. As AI takes on more complex roles—such as financial analysis and audits—CPAs may struggle with trusting AI’s decisions, especially when its algorithms are too complex to fully comprehend,” Rashid says. “AI provides efficiencies, but the human element—creativity, adaptability—remains crucial.”

Jim Carroll agrees. He challenges the common fear that AI will replace CPAs entirely. “You won’t be put out of work by AI,” he says. “But you might be put out of work by someone who’s empowered themselves with AI.” For Carroll, it’s not about eliminating jobs but about transforming them. The repetitive aspects of accounting are fading away, and what remains is demand for outside-the-box thinking

and emotional intelligence—qualities that machines cannot replicate—at least not quite yet.

Carroll isn’t the only futurist preparing CPAs for a new era. Lindsay Angelo, an American-Canadian futurist based in Seattle, is also leading the charge. Angelo spent six years in corporate strategy at Lululemon, where she learned that the company’s success wasn’t just about creating a great product, but about cultivating a purpose-driven brand and culture. “People often think of Lululemon as an apparel company, but in actuality, Lululemon was born from a desire to enable people to become their best selves,” she says. According to Angelo, Lululemon’s incredible success—with annual revenue nearing US\$10 billion—reflects a broader trend in how consumers and workers, particularly the Gen Z and Alpha generation (born between 2010 and 2024), increasingly seek



Jensen Huang, CEO of Nvidia, showing new robotics at Nvidia GTC keynote in early 2024

to connect with aspirational brands that stand for something and lead with purpose. Angelo has integrated these insights into her consulting work, helping executive teams, including numerous CFOs, adopt a strategic mindset to navigate the future. Last year, she also launched a course called Futurist in 50 Days, which teaches teams how to build the capability to think ahead, spot trends and make proactive decisions. “The pace of change is accelerating,” Angelo explains. “Building the ability to problem-solve and think with great agility—given how quickly things are shifting—those skills are going to be more important than ever.”

Additionally, Richard Worzel, a Canadian futurist in Guelph, emphasizes to his clients that it’s important to consider multiple futures rather than bet on a single trajectory. “The biggest mistake companies make is thinking there’s just one future,” he says. “Businesses, particularly in accounting, must prepare for a range of possibilities—especially as AI continues to develop alongside demographic and cultural shifts.” Worzel’s perspective echoes Carroll’s conviction: CPAs can no longer afford to be mere “bean counters.” Instead, he believes the future belongs to those willing to engage with new technologies creatively and proactively. For Worzel, one potential approach that could reap dividends in the accounting profession is the concept of cobots—collaborative robots that work alongside humans. “AI will do what it’s good at—routine, repetitive tasks. Humans will handle problem-solving and novel situations,” he says. The cobot model represents a partnership between technology and people, maximizing efficiency and allowing accountants to focus on higher-value work.

As part of this higher-value work, Shayan Rashid sees future opportunities for his firm in AI governance and data privacy. Increased reliance on AI-driven systems and the extensive use of client data means there’s growing demand for oversight to ensure ethical usage and compliance with regulations. Rashid believes CPAs can educate themselves to provide expertise on how AI systems are implemented, evaluated and audited. This includes assessing risks associated with data privacy and ensuring that AI systems adhere to legal and ethical standards. By stepping into these positions, CPAs can offer substantial value to their clients, positioning themselves as essential advisers in a data-driven world where trust and transparency are paramount.

Angelo also sees an emerging crucial role for CPAs in creating purpose-driven business models that go beyond sustainability to regeneration. As climate change and social responsibility become more pressing concerns, she believes that firms with a strong, purpose-driven culture will gain a competitive edge in



Richard Worzel,
*futurist and business
visionary whose
keynote speeches
challenge companies
to innovate and
prepare for the future*



Doroni Aerospace's flying EV

“Businesses, particularly in accounting, must prepare for a range of possibilities—especially as AI continues to develop alongside demographic and cultural shifts”

attracting top talent, especially among younger workers who prioritize careers that align with their values. To entice those workers, firms must transition their core philosophy and priorities away from a profit-centric framework. “We tend to think of profit and purpose as mutually exclusive, but I encourage my clients to explore how to find that magic middle, where purpose and social impact are the bridge to profit,” she says.

Futurists and innovative CPAs each bring a unique perspective on what’s next for the accounting profession, but all agree on one thing: the old ways of doing business are no longer sufficient. Whether it’s embracing AI, rethinking work culture or finding new methods to add value, the firms that succeed will be those that understand and accept change. “Firms that listen and adapt will attract the best talent and the right clients,” Ozaki says. “The others will struggle to keep up.”

For Carroll, the inquisitive spirit that kick-started his futurist journey back in 1982 still endures in 2024. On any given day, you can find him in his Guelph home office researching blockchain or configuring Ubuntu servers for a personal project—endeavours that are a far cry from the basic functions of his Thornet information-sharing network nearly 40 years ago. It’s all part of his ethos to keep learning and staying on top of new trends as a futurist, an ethos that CPAs can also benefit from. When faced with unfamiliar technologies and possibilities, don’t sit back and wait—jump in, learn and make it work for you. It’s what Carroll did with the TRS-80, and it’s what he advises CPAs to do now: “The job of a CPA will change, but those who embrace change will find new opportunities and thrive.” ♦

Mission Critical

By Liza Agrba

Innovative, tech-driven companies are embracing the risk that comes with any entrepreneurial endeavour. They're also attracting CPAs who find that helping these firms navigate the ups and downs of business is its own reward.

Karla Connolly, CPA and interim president and CEO of Genesis in St. John's, Newfoundland and Labrador

When CPA Karla Connolly started working at Genesis, a St. John's-based non-profit tech incubator, she found herself genuinely looking forward to Monday mornings. Initially serving as the company's director of finance and operations, and now as its interim president and CEO, Connolly's financial and strategic expertise helps bring innovative ideas from a suite of boundary-pushing tech companies to the fore. "We're working together to try to shape the future of tech here in Newfoundland and Labrador, and actively contributing to this transformative period in our province's history is incredibly motivating," she says.

Connolly is one of many CPAs who lend their skills to innovative companies that prioritize fresh perspectives and dynamic problem-solving over a rigid focus on quarterly earnings. Since even the best ideas flounder without sober financial guidance, their work is indispensable—and for CPAs in this field, a rock-solid sense of purpose is a major perk. But mitigating financial risk in largely unknown territory is a formidable challenge.

Innovation-minded companies distinguish themselves through a relentless focus on creativity, improvement and a proactive approach to change. Unlike their more traditional counterparts, these companies generally prioritize research and development, invest heavily in new technologies and foster a culture that encourages experimentation and calculated risk-taking.

“Calculated” is the key word there, of course, and that’s where CPAs like Connolly come in. You have to leave your company the requisite space for creative freedom, since overly tight purse strings may not afford fulfilling the mission. But neither can you ignore the necessity of strong financial governance. Walking this tightrope is something of a delicate dance—especially when your company is doing something that hasn’t been done before.

“Managing the extreme uncertainty and dual risks of technology and financing is one of the biggest challenges of working in an innovation-driven company,” says Greg Twinney, CPA and CEO of General Fusion, a firm in Richmond, B.C., working to develop clean energy with nuclear fusion. “Unlike traditional, more established companies—which have a financial history, trajectory, predictability and established models to lean on—we regularly navigate uncharted waters.”

Right now, General Fusion is building a fusion demonstration machine in Vancouver at 50 per cent of commercial scale. It’s a massive (and costly) project, and if it goes right, it could be a game changer for the race to a de-carbonized future. (Achieving fusion energy could provide a virtually limitless, zero-emissions energy source, reducing our reliance on fossil fuels.)

But the demonstration wouldn’t include every possible bell and whistle, even if the firm had unlimited resources. For instance, General Fusion’s process includes compressed plasma, which relies in part on liquid metal. And while that makes sense for a commercial power plant, it was too expensive for the demonstration project, so they opted for a solid plasma compression system instead—saving several times the amount of capital they would otherwise need to demonstrate the technology.

“Building a fusion power plant with all the attributes we would love to demonstrate as soon as possible would cost us many hundreds of millions of dollars,” says Twinney. In lieu of that, Twinney had to ask and answer a few hard questions. Since they can’t afford to build all those pieces, what are the most important things to showcase? And how can it be done within the company’s means? That meant spending a lot of time negotiating with the company’s engineers and scientists and working through many different potential outcomes.

Like so many CPAs working on the cutting edge, Twinney still had to activate his risk management training even as he explored a new frontier. He’s made an entire career out of this particular skill. “The common thread for me has been partnering with a founder and turning their ideas into a healthy, scalable business,” he says. Before General



Greg Twinney, CPA and
CEO of General Fusion
in Richmond, B.C.

“My accounting background enables me to take virtually any business and map it out from a financial perspective.”

Fusion, Twinney helped bring the mortgage and insurance disruptor Real Matters to a billion-dollar IPO, one among similar successes dating back to the dot-com era. “My accounting and finance background enables me to take virtually any business and map it out from a financial perspective, which is often the expertise missing when you team up with a founder with deep technical expertise in their field. Some of that financial and operational acumen came from my CPA training, and some from experience.”

Connolly also knows well the see-saw of risk management and innovation. One company that’s gone through Genesis’s incubation programs is developing tech to help improve workplace safety in the mining and offshore industry. Another is working on early detection for Parkinson’s disease. Their work is potentially groundbreaking, and these companies need stable support to make it

through the early stages. “It’s inspiring to see the clients working alongside each other within the Genesis workspace, learning from one another and lifting each other up,” she says. “Being an entrepreneur isn’t easy, and we get to lift them up and be their community as they work through important problems, identification and solutions. It’s deeply inspiring to watch.”

But they’re not cheap to finance. Between market volatility and economic downturns, maintaining a steady stream of public funding and private investment is no easy feat. Then there’s the financial burden of recruiting and retaining top talent; the tech sector is certainly not alone in that challenge, but Connolly says non-profit tech incubators like Genesis are really feeling the squeeze. It’s not just about compensation—other essential expenses, like technology, infrastructure, facilities, and training

and development, are all part of the picture. Managing the resources to maintain and grow that operational backbone is crucial for innovation-minded companies like Genesis to do what they do best.

“Incubators in the tech space face significant financial challenges, particularly when it comes to sustaining funding and scaling operations as our programs grow,” says Connolly.

To that end, Connolly says that being a CPA has been a north star throughout her career—and that continuous learning is what’s brought her to her current role. “When I got my CPA, I thought that was the end, but it was just the beginning,” she says. Connolly is currently working on her MBA, and her “eternal student” philosophy has translated beautifully to working in innovation.

Before Connolly came to Genesis, she worked as a senior finance supervisor at Newfoundland and Labrador Hydro, a crown corporation with a staff of more than 1,500 people. Her finance team was proportionally large, and transitioning to a small firm like Genesis was a bit of a culture shift. Fortunately, Connolly was able to take everything she learned there—and in her CPA training—to build a high-performing finance and operations team at a smaller scale. “Having the foundation of being a CPA has truly guided me to where I am today,” she says.

Building the financial infrastructure in a company that’s been more focused on ideas than anything else is a common experience for CPAs in innovation. When Harry Patterson (CFA, CPA, CMA) took a job as financial controller of Deep Genomics—a Toronto-based biotech start-up that uses artificial intelligence to help build life-saving genetic therapies—the firm used an outsourced bookkeeper. Patterson was the company’s first financial hire, and his major challenge was building the right processes to adequately prepare the company for its financial future.

“When someone doesn’t have an accounting background, they may not understand how to build a robust control environment. You have to set everything up—spending, invoice approvals, payroll approvals—to facilitate financial statements and audits,” Patterson says. “If those processes have not been intelligently designed with the experience of having gone through a CRA audit, for example, you’re probably not capturing the right data.”

Now, Patterson’s role is about maintaining the company’s financial health while it develops technology it hopes will revolutionize medicine as we know it. Soft skills, Patterson says, are indispensable to that end. “Through my career, I’ve worked with very technical, capable engineers and scientists who



Harry Patterson, CPA and financial controller at Deep Genomics in Toronto

“I was attracted to innovative companies because I like the depth of opportunity they offer. You’re not pigeonholed into doing one thing.”

have no finance training whatsoever,” he says. “Helping them get up to speed is a primary part of the job. If you’re going to be at a start-up, you can’t just be the finance resource. You have to be the finance educator.”

In one traditional view of leadership, if a company were a car, the CEO would be the accelerator, and the CFO would be the brakes. It’s never that simple in real life, and that’s especially true for innovation-focused firms where finance professionals need to take a diplomatic approach that prioritizes the company’s ambitious vision. Before Twinney led General Fusion, he was its CFO, where he learned first-hand how important it is to communicate effectively when you’re trying to reel in spending while continuing to build value for the company.

“Sometimes, the hardest part of the job is convincing people to walk away from what looks like a good opportunity,” Twinney says. “But if all you’re doing is pumping the brakes without communicating why you’re doing so, and how that actually

and fuelling new projects. Plus, a balanced focus helps keep investors confident in the knowledge that the company can manage its expenses—even as it works toward ambitious goals.

“The end goal is ultimately to direct resources to the most promising projects, right? We don’t want to put all of our focus into a project that’s going to fail, or a project that’s attractive and interesting but not aligned with our mission,” says Connolly. “CPAs have a real understanding of how to do that. Whether through risk management strategies or a keen financial plan, we can help ensure that projects that we undertake are viable and sustainable.”

Balancing innovation and sustainability isn’t easy, but for many CPAs, the palpable energy of working in a boundary-pushing firm makes it worth the effort. For one thing, finance professionals at companies that focus on innovation tend to wear many hats—they don’t just facilitate success in the background, but partner directly with the firm’s creative forces.

“If you’re at a big four firm, you might become an expert in a very particular area, and that’s what you do every day,” says Patterson. “But I was attracted to innovative companies because I like the breadth of opportunity they offer. You’re not pigeonholed into doing one thing and tend to really have a hand in the success of the technology.”

One of Patterson’s biggest achievements was helping lead Deep Genomics to one of its biggest financial milestones—a US\$180 million Series C funding round in 2021, one of the largest private raises for a biotech company in Canada. It’s helped the company scale its AI drug development platform, and Patterson feeds off the optimism the company’s mission inspires in all its employees. “Nobody’s just there for a paycheck,” he says. “Maybe you can get paid more somewhere else, but there’s this altruistic quality to the mission that changes the nature of the work. There’s this wonderful culture—we’re in new territory, and we’re not operating on perfect information, so you’re not as likely to get stuck in analysis paralysis.”

In some ways, being a CPA is like having a skeleton key. The skill set is both specific and highly versatile—financial management, strategic planning and regulatory compliance are relevant in virtually any industry. But if the idea of coming to work with a self-evident “why” resonates, an innovation-focused company might be an especially rewarding route. If there’s a unifying creed in the many and varied ways a company can steer itself toward innovation, it’s the belief that hard work—underpinned by sound financial strategy, of course—can bring about a better world. And optimism has something of a reputation for being infectious. ♦

creates value by keeping the company healthy and capable of fulfilling its larger mission, you might find that you just stop getting invited to the important meetings. To maintain influence and credibility in situations like that, soft skills are crucial.”

One key strategy is a balanced focus on top-line revenue and bottom-line profit. Innovation tends to involve significant investment, and keeping an eye on the bottom line ensures that the company can sustainably fund its initiatives. But neither can you neglect the top line, which is essential for driving market expansion, capturing new customers