This is an independent report commissioned by CPA Canada and prepared by Catalytic Governance.

Catalytic Governance is an inclusive process that encourages constructive dialogue, creates shared mental maps and most importantly – drives communities of practice to action. CPA Canada Foresight uses the Catalytic Governance framework – for both in-person roundtables and online community participation – to engage the Canadian CPA community to reimagine the future of the profession.
# Table of Contents

CPA Canada Foresight: Report on Phase I: Introduction ................................................................. 4  
   *The project ................................................................................................................................. 4  
   *Catalytic Governance .............................................................................................................. 5  
   *Dialogue ................................................................................................................................. 7  
   *Scenarios ................................................................................................................................. 7  

Key certainties and uncertainties .................................................................................................. 8  
   *“Aha” moments ......................................................................................................................... 8  
   *How the world will change: Critical certainties ..................................................................... 11  
   *What we don’t know and can’t control: Critical uncertainties ............................................... 11  

   Scenario 1 Slow and Steady ....................................................................................................... 14  
   Scenario 2 Phoenix Rising ......................................................................................................... 16  
   Scenario 3 Tech Titans ............................................................................................................... 18  
   Scenario 4 My Way .................................................................................................................... 20  

Workstreams .................................................................................................................................. 22  

Creating a strategic direction ....................................................................................................... 24  
   *Goals and aspirations ............................................................................................................... 24  
   *Strategic direction .................................................................................................................... 25  
   *Priorities and next steps .......................................................................................................... 26
CPA Canada Foresight: Report on Phase I:

**Introduction**

The CPA profession is experiencing unprecedented challenges and opportunities in Canada and globally. New technologies such as blockchain and AI threaten to eliminate or replace many traditional accounting functions. In addition, shifting societal attitudes towards inclusion and sustainability, evolving business models, and blurring boundaries between industries are making historical data less relevant, as transactions will soon be processed, and decisions made, in real time.

**The project**

To address these fast, complex, and far-reaching changes, the CPA Canada Foresight project has assembled a broad cross-section of leaders in public practice, government, academia, and industry for a series of roundtables aimed at reimagining the future of the profession. At the same time, the project leveraged the scale and insight of the CPA's members through ongoing digital discussions.

The face-to-face roundtable met in Fall 2018 for three multi-day workshops (one in September, one in October, and one in early December); in between these roundtable workshops, one-day sessions were held to share insights and gain feedback on the process and findings. These sessions included one-day internal workshops held in Winnipeg and Toronto with representatives of the volunteer leadership and management of CPA Canada and CPA provincial bodies. In addition, three one-day scenario confirmation sessions were held (in Vancouver on November 26, Montreal on November 28, and Toronto on December 3), in which a broader group of members responded to and further refined the draft scenarios.

Throughout, participants in the digital discussions offered feedback on the process and the findings; by the end of Phase One, the digital roundtable included 1,200 participants from across Canada and around the world.

The last meeting of Phase One took place in January 2019, when a group of roundtable participants gathered for a Strategic Direction workshop that tied together the learnings from the digital and in-person roundtables to forge a new strategic direction for the profession over the next 10 years.

The overall roadmap of the project is outlined in Figure 1.
Figure 1: CPA Canada Foresight project roadmap

**Phase One**

1. **Digital Conversation and Interviews**
   - July - September
   - Begin to imagine what the future of the profession can look like

2. **Framing Workshop**
   - September - October
   - Prepare expert panels on learning agenda topics. Research papers on key scenario uncertainties and other topics!

3. **Scenario Building Workshop**
   - October 15 - 17
   - Videos of expert presentations shared. Shared research papers on key scenario uncertainties. Clarifying questions on key uncertainties.

4. **Confirmation Workshop**
   - November 26 - 28, December 3
   - Present, critique and affirm scenarios. Review initial strategic implications. Identity all work to complete and write up scenarios.

5. **Strategic Options / Outreach Workshops**
   - January
   - Write up final scenarios. Inputs to strategy options and outreach review.

6. **Strategic Options / Outreach Workshops**
   - January
   - Write up final scenarios. Inputs to strategy options and outreach review.
Catalytic Governance

The CPA Canada Foresight project is based on the Catalytic Governance model. Catalytic Governance is based on the insight that effective leadership and governance depend less on traditional command-and-control processes and more on creating shared meanings and frameworks that engage a broad diversity of stakeholders. The model consists of five iterative steps (see Figure 2):

1. Conveners frame the problem and agenda, defining the process to be followed, the range of stakeholders to be included, and the boundaries for acceptable solutions. These conveners engage a wide range of stakeholders around the issue.

2. All conversations and engagement among these stakeholder participants are conducted as dialogue (see next section), leaving participants free to speak for themselves, not as representatives.

3. Participants explore a variety of perspectives on the issue and work together to develop alternative possibilities (scenarios) for how it may unfold in the future. This provides a way for participants to understand and learn from others’ points of view, and to start to see the limitations of their own. Ensuring that multiple viewpoints are taken into account creates a richer view of the issue and its possibilities.

4. Stakeholders define their desired future and develop practical action steps to realize that future. Often this will require a process of action learning – taking experimental actions and learning from the result. To be effective, the stakeholder group must include key individuals who are in a position to bring about change and who are willing to take action.

5. In the final step, the conveners take the lead, first by ratifying and disseminating the result of the Catalytic Governance process, and then by acting and encouraging action on the emerging strategy and monitoring the results. Crucially, this step is not a simple end point; it is itself a process of action learning and can feed back into further Catalytic Governance cycles.

Figure 2: The Catalytic Governance process
Catalytic Governance is an ongoing iterative process that surfaces new insights by enabling participants to learn from each other and external leaders, develop a shared understanding of challenges, and apply that learning to reframe the context for policy and strategy.

Two features are especially central to the Catalytic Governance model: dialogue and the use of scenarios. By using dialogue to develop scenarios about possible futures, the Catalytic Governance approach surfaces assumptions, maps common ground, and builds mutual understanding and trust.

**Dialogue**

The CPA Canada Foresight process used dialogue as its primary tool for exploration. Dialogue is a specialized form of discourse aimed at surfacing assumptions, mapping common ground, and building mutual understanding and trust. Unlike debate, which presumes that there is one right answer (yours!), dialogue is based on the premise that everyone has a piece of the answer.

To encourage the openness and frank exchanges needed for true dialogue, participant viewpoints expressed in these sessions were recorded without attribution.

**Scenarios**

Using dialogue, participants developed scenarios for the future. Scenarios are plausible stories about how our world might evolve, based on the seeds of change we already observe today. The sources of change are often situated outside the immediate accounting industry and profession: they are global, macro forces—social, technological, economic, environmental and political—with the power to reshape the world, and with it the challenges and opportunities facing the profession.

By illuminating these forces and combining them into a small number of plausible future stories, the scenario process provides CPA Canada with a map of threats, opportunities and future possibilities. We do not know which scenario will play out, if any. But the ideas and conversations sparked by these scenarios have provided a richer understanding of how the profession must change to meet the challenges of the future.

You can’t plan for a future you can’t imagine.
—Oren Berkovich, CEO, SingularityU Canada, Roundtable Speaker
Key certainties and uncertainties

Throughout the series of workshops, there were several key factors that shifted participants’ thinking. Several of these “aha moments” were inspired directly by the information in the expert presentations and the discussions they generated; others arose from the more holistic process of informal conversation, cooperation and shared purpose among participants in the face-to-face and digital roundtables.

“Aha” moments

- **The speed and scope of digitization:** When participants first entered the room, many saw the digital revolution as a significant but essentially linear development from how things were at the turn of the 21st century. The first presentations upended that assumption, laying out a picture of exponential change in the era of big data and vastly increased connectivity. In particular, Sree Ramaswamy’s “The Future of Globalization and Digital Flow” had a powerful impact on participants’ view of what was coming, noting that the flow of information is up 45-fold since 2008, while flows of goods, services, money and people are flat or decreasing. Similarly, presenter John Seely Brown described the current moment as “a white-water world” in which everyone is swept up in a torrential flow of data. Success depends on the ability to kayak these rapids, reading patterns and tracking the flow of information rather than attempting to capture it and look back on it after the fact. As they discussed these presentations, participants quickly realized that the question was not whether change would happen but how fast and how thoroughly it would disrupt the status quo.

  I’m really struck by the idea of a flow of information and patterning of information as opposed to it being a static historical database. We now have an exponential amount of data we have to keep our eye on, and we have to be watching its pattern rather than trying to fix that data and look backwards in a snapshot. How do we change the way we think so that we are looking at data flows and undercurrents? How do you see the forest vs the trees? — Roundtable participant

- **This discussion is not just about accounting/not just about Canada:** These initial presentations also spurred participants to broaden their thinking from an initial focus on Canada and the accounting profession to a more holistic and global perspective. While participants were experiencing these changes from within the profession, and primarily from inside Canada, they came to realize that the changes were far more far-reaching in origin and in scope – understanding and anticipating them would require participants to step outside the comfort zone of their usual framework.

- **Millennials are not that different; the world is what’s different:** A presentation on millennials and Gen Z argued that the most-hyped differences between younger and older cohorts are more a function of age and life stage than of actual generational change. What is different is the context for work in the 21st century. As organizational models are becoming more horizontal and network-driven, and the trend is towards open career models and continuous learning, younger workers are shaping their careers accordingly.

  Generation Y are not Martians. Generation Z are not from Pluto…. There’s actually a lot more that the generations have in common than we have differences on…. And so the question is really, if this was the organizational world that you were in, and you were 25 or 30, what type of organization would you want to work for? — Philip Hunter, Senior Consultant, Verity International, Roundtable speaker
• **Concrete examples of how user needs are changing:** Throughout the roundtables, participants encountered concrete examples of how changes in the social and technological environment are impacting the financial landscape and with it the role of accountants.
  
  o Real-time decision making: In the second face-to-face roundtable, for example, Amar Ahluwalia (Vice President of Partnerships and Capital Markets at the online lender On Deck) described his company’s data-driven approach, which draws on more than 2,000 data points from 100 real-time data sources to make lending decisions – so quickly, in fact, that the company has had to slow its model down so customers aren’t unnerved by it seeming too fast. In such an environment, traditional quarterly financial statements are increasingly irrelevant.
  
  o An end to audited financial statements: Similarly, it was noted in discussion that large pension funds are making investments in data that allow them to predict earnings before companies announce them – and sometimes before the management of these companies know themselves. As these models continue to improve over the next two or three years, pension funds may no longer rely on audited financial statements

• **Value is increasingly intangible:** Along similar lines, Jon Lukomnik, roundtable speaker (Executive Director of IRRC Institute and Managing Partner of Sinclair Capital LLC) looked at what he called the “existential crisis” facing the profession. Noting that today the tangible assets tracked by traditional accounting make up only 16 per cent of the S&P’s market value (as opposed to 83 per cent 40 years ago), Mr. Lukomnik argued that the profession must be able to account for intangible assets if it is to remain sustainable. John Helliwell (Senior Fellow at the Canadian Institute for Advanced Research and UBC Professor Emeritus) drove home this idea, arguing that accountants will need to count intangibles like wellbeing, sustainability and even happiness.

  Intangible assets now make up 84 per cent of the market value of the S&P 500. That's up from just 17 per cent in 1975. So the generations of accountants before you could account for the vast majority of things that we investors value. But traditional accounting now accounts for a very small minority of overall value. —Jon Lukomnik, Executive Director, IRRC Institute, Roundtable speaker

• **The “Wild West” of data governance:** Presenter Rohinton Medhora unpacked the very different approaches to data governance in different parts of the world. He noted that globalization is taking place extremely fast when it comes to data, more slowly in trade and services, and slowest of all when it comes to labour and regulatory responses. In Canada, participants realized, data governance is still largely nascent, and the accounting profession can play a significant role in developing new frameworks and standards.

  It feels a little bit like the Wild West, with all kinds of things going on, and then it struck us that the Wild West wasn't constructed by people who showed up to ask what's our role? The Wild West was established by people who were entrepreneurial and innovative and enterprising and got there first and decided to do things a certain way. And so, if we sit around waiting for the opportunity to bring our discipline, it's not going to happen. We must figure out what our place is.
  —Roundtable participant
• **CPAs need to create the models**: Participants soon realized that these trends mean that in the future accountants will need to count more and different things – often things we do not yet know how to count. Presenters and participants alike emphasized that accountants need to be involved in creating the models and processes used to measure and predict value, not just reacting to them.

> **What is the short-term vs. long-term data?** What creates value vs. what leaves a legacy? This profession must make those determinations, because otherwise the economists or others such as engineers will do it. —Sree Ramaswamy, Partner, McKinsey Global Institute, Roundtable speaker

> **While tech will drive the future, it requires educated and broad-based human capital to create intellectual capital. This requires both global movement of people and lifelong education. Both are foundational principles.** —Digital roundtable participant

• **Stewardship**: Mr. Helliwell’s remarks crystallized participants’ understanding of their own role as stewards of the public trust. Not only does the profession create the conditions that make for a happy life and a successful society, its expertise and its legacy of integrity means that accountants are best positioned to make sure that new models for assessing value are fair, comprehensive and accurate.

> [The question is not] “What do we have to do in order not to be accused of malfeasance of one kind or another?” That’s just avoiding the negative. You want to say, “What should I be advising people to do, so that when they go home at night, they can say, I have done the right thing.” And so you can go home at night and say, “I have advised them to do the right thing.”
> —John Helliwell, Senior Fellow, Canadian Institute for Advanced Research and UBC Professor Emeritus, Roundtable speaker

> We have always been stewards of public trust. But every time we had a financial crisis or ... a bump in the road, [it] narrowed our thinking, narrowed our obligations with respect to compliance. It forced us down a certain road. This [panel] has opened up our eyes – we have to rethink how we do business going forward.
> —Roundtable participant

> I think the greatest challenge will be acting ethically – doing what is "right" versus what is just legal. The more we act in our own self-interest the more we potentially disadvantage others. Second will be the danger of becoming involved in illegal cross-jurisdiction activities.
> —Digital roundtable participant

All these insights helped participants to see the many ways that the explosion in data is radically reshaping the world accountants live and work in. Yet while this represented a major disruption, it was not a harbinger of doom. Participants realized that accountants could choose to follow the example of other professions and become hubs for innovation to meet the challenges and opportunities of this new world.

> **We need to embrace technology wherever possible in order to free up our time to be better advisers.** Our clients no longer need us for compliance and historical reporting, they need us to help make them more successful. —Digital roundtable participant
How the world will change: Critical certainties
As participants scanned the future, they identified several ways that the world was changing around them. These critical certainties would be factors in any foreseeable future:

- **Exponential growth in technology**
  - Real-time information and AI
  - Accelerating pace of adoption
  - Increasing user expectations for self-service options

- **Shifts in what must be measured**
  - More things to count
  - More of overall value will be driven by intangibles

- **Demographics/population growth**
  - Aging Canadian population overall
  - Pace may be offset by immigration

- **Climate change**
  - Impacts may be moderate or severe, but there is no plausible future in which they do not exist at all

- **A need for ethics, trust, integrity**
  - In a mistrustful world, a trusted advisor is especially critical

- **Unexpected crises and surprises**
  - It’s not possible to anticipate every possible contingency
  - Flexibility and adaptability will be essential

What we don’t know and can’t control: Critical uncertainties
The essential work of building scenarios is identifying critical uncertainties: important external variables concerning the future that might unfold in a number of different ways. These uncertainties are external to the profession and outside its control – and they are critical, that is, how they unfold will have significant consequences not only for the profession, but also for the world as a whole.

- **Data access and governance**
  - Will the wild west of data proliferation be tamed, and if so, how fast?
  - Will data be openly available, or will there be privacy regulations at a transactional level?
  - What will structure and standards around data governance look like?

- **User needs**
  - How important is trust to stakeholders and the public?
  - Is trust placed in technologies such as AI or in humans (and how much)?
  - Will younger generations have different expectations and needs?

- **Reaction to technology innovation and adoption**
  - Will it be embraced or resisted?
  - What impact will this have on the adoption of new technologies?
- **Severity and impact of climate change**
  - How will people respond to the increasing risk of climate related disasters?
  - Will there be a global solution to adapt to and/or mitigate the risks of climate change?

- **Inequality/concentration of wealth**
  - Will the have/have-not gap widen or narrow?
  - How will government respond?

- **Global economy/political bodies**
  - Will prevailing trends be towards integration or fragmentation?
  - Will global economies contract or expand?

- **Trust**
  - How important will it be?
  - Where will it be placed?

Participants worked together to identify the uncertainties that they felt would be most important in shaping the future conditions for the world, and hence for the profession. The two that rose to the top in every conversation were change and social capital.

**Change**: The question here was not whether change will happen. Participants agreed that climate change and technological change are both already baked into any plausible future: they are underway, significant, and will not stop. The more important question was, how willing will societies, businesses, institutions and individuals be to embrace these changes and the transformations they will bring about in society? This idea of “willingness to embrace technological and social change” was incorporated into the x-axis of a potential scenario matrix. At one end of this axis was caution, conservatism and an emphasis on safety; at the other, a willingness to experiment and innovate, as well as a higher appetite for risk.
Cohesion and social capital: The other most important uncertainty centered on the idea of collaboration, cohesiveness, freedom and trust. These were combined into a single axis measuring “cooperation, cohesion and social capital.” At one end there was strong collaboration and alignment around shared goals, high trust in institutions, and a willingness to accept some restrictions of personal freedom in the name of the larger good. At the other end was a more fragmented and disjointed reality, with a high premium on individual liberty, and trust vested in local entities rather than large institutions. By crossing the two axes, participants generated the following scenario set:

Over the course of several weeks, with input from the digital roundtable and scenario feedback sessions, these four quadrants were fleshed out into four distinct scenarios.
SCENARIO 1

SLOW AND STEADY

(high social capital/resistance to transformational change)

This is a world where institutions constrain the pace of change and innovation, as society prefers consensus, stability and risk avoidance.

IN THIS FUTURE, THERE IS A STRONG EMPHASIS ON CONSENSUS AND INCLUSION IN DECISION-MAKING AND WIDESPREAD WILLINGNESS TO TRUST TRADITIONAL POLITICAL, RELIGIOUS, AND BUSINESS LEADERS IN THE NAME OF STABILITY. ESTABLISHED INSTITUTIONS LIKE THE UN AND THE WTO MAINTAIN THEIR POWER, CREATING A BROADLY COLLABORATIVE INTERNATIONAL POLITICAL CLIMATE AND SPURRING EFFORTS TO BUILD COLLABORATIVE, THOUGHTFUL SOLUTIONS TO SOCIAL AND ECONOMIC PROBLEMS. IN CANADA, EDUCATION IS MORE ACCESSIBLE, AND SOCIETY IS BECOMING MORE INCLUSIVE AND EQUITABLE. TECHNOLOGY ADOPTION PROCEEDS CAUTIOUSLY, WITH STRICT REGULATIONS IN PLACE TO PROTECT DATA SECURITY AND PREVENT POTENTIAL UNINTENDED CONSEQUENCES OF INNOVATION.

BUT WHILE THERE IS LOTS OF TALK AND SOME NEW IDEAS, THE CAUTIOUS AND CONSENSUS-LED MODEL LIMITS EXPERIMENTATION AND PREVENTS RAPID ACTION. CANADIAN ECONOMIC GROWTH IS SLOW, AND COMPANIES ARE SLOW TO ADOPT AI AND OTHER EFFICIENCIES. FEW PEOPLE HAVE AN APPETITE FOR THE RISKS OF ENTREPRENEURSHIP, AND THOSE THAT DO ARE HAMPERED BY EXTENSIVE REGULATORY AND APPROVAL PROCESSES. THERE’S ALSO BEEN A PERSONAL AND INSTITUTIONAL CREDIT CRUNCH, AS FINANCIAL INSTITUTIONS HAVE HAD TO SLOW DOWN THEIR APPROVALS PROCESS.

SOME BUSINESSES AND CONSUMERS, FRUSTRATED BY THE SLOW AND STEADY PACE, SKIRT THE RULES, TURNING TO UNREGULATED LENDERS AND GREY-MARKET GOODS AND SERVICES. WHEN THESE EFFORTS GO ASTRAY, LEADERS AND REGULATORS RESPOND WITH FURTHER RULES AND STRICTURES, WHICH FURTHER SLOW THE PACE OF CHANGE.
ENVIRONMENTAL CONCERNS ARE THE FOCUS OF MUCH INTERNATIONAL DEAL-MAKING AND STANDARD-SETTING AS INSTITUTIONS SEEK TO MAINTAIN STABILITY IN THE FACE OF INCREASING CLIMATE RISK. BUT DESPITE STRICT REGULATIONS, COUNTRIES STRUGGLE TO MEET THEIR IMPOSED TARGETS FOR CARBON EMISSIONS.

IMPLICATIONS FOR ACCOUNTING:
• Robust need for traditional roles such as external reporting, tax, assurance and performance management
• Expanded role in standard setting, establishing frameworks and regulation related to the environment, data governance and fraud
• Increased need for CPAs in implementation and operationalizing standards and compliance
• Need for collaboration, multi-disciplinary and global view
• Enable collaboration, lead multidisciplinary teams, build trust
• More moderate pace of tech adoption means profession has more opportunity to keep abreast, become experts/resources for clients re: data privacy, integrity, data security
• Opportunity to take advantage of tech efficiencies rather than re-tooling
• Enabling skills: communication, flexibility, negotiation, trust and integrity, international mindset, skepticism
• Technical skills: reporting, performance management, data, security, environment, auditing, analytics, governance, policy, strategy and risk management
• Opportunities in data privacy, data integrity and creating standards around data governance
• Reducing client fear and providing frameworks that provide a way forward in light of many of the Drivers of Change; helping companies figure out what to do, when and how

WHAT METRICS MIGHT INDICATE WE ARE MOVING IN THIS DIRECTION?
• Lower productivity
• Fewer startups
• Political continuity — elected officials have longer tenures
• Employment predictability — low turnover
• R&D spending relatively low, especially corporate
• Spending on retraining relatively high
• 20–25-year-olds looking for opportunities/fulfillment outside of formal careers
• Higher retirement age
• Multilateral agreement talks
PHOENIX RISING
(high social capital/embrace transformational change)

This is a world where a series of major crises force societies to reset priorities, collaborate, and embrace transformative technological & organizational change.

In this future, a series of major shocks (including climate disasters, pandemics, and financial disruptions) sweep the world in the early 2020s; these calamities leave no one untouched — including the wealthiest of the global one per cent. In response to these crises, political leaders, prominent business figures, and popular movements unite around a shared commitment to civil society and a new ethos: profit and prosperity are important, but not at the cost of the wellbeing of generations to come. If we as a species are to survive, we must address both climate change and economic inequality, and we must work together to do so.

As nations begin the process of recovery, a spirit of cooperation and collaboration takes hold. New multilateral arrangements are formed to deal with specific challenges like Amazon deforestation, social inequity resulting from AI-related job losses and the need for secure international data networks. Recovering economies are assisted by widespread introduction of universal basic income schemes. GDP is replaced by more holistic measures of national well-being. Technology (e.g. online learning) creates more opportunities for reskilling and work in remote and rural areas. Major advances in AI, energy efficiency, 3D printing, and online education are all geared towards enhancing collaboration and social/environmental progress.

Sustainable development goals and principles become central to all decisions made by governments, organizations and consumers. Data networks provide constantly accessible real-time information about the state of society and the planet to help drive responsible behaviour. Investments in high tech green infrastructure help reduce the world’s carbon footprint.
LIGHT-TOUCH PRINCIPLE-BASED REGULATION ENCOURAGES INNOVATION FOR THE COMMON GOOD. HOWEVER, SOME BAD ACTORS (COUNTRIES, GROUPS AND INDIVIDUALS) ABUSE OPEN NETWORKS TO GAIN PROFIT AND POLITICAL ADVANTAGE.

MANY PEOPLE ARE WILLING TO WELCOME NEW THINKING AND ADOPT NEW BEHAVIOURS IN THE NAME OF PROGRESS TOWARDS COMMON GOALS. AT THE SAME TIME, THE INTENSIVE AND INTRUSIVE SURVEILLANCE OF DATA AND BEHAVIOUR RAISES MANY CONCERNS. SOME STILL MISS THE MORE FRAGMENTED, INDIVIDUALISTIC PAST WHERE PEOPLE WERE ENCOURAGED TO PURSUE PERSONAL WEALTH AND SUCCESS.

IMPLICATIONS FOR ACCOUNTING:
• Major opportunities to apply our knowledge in new performance indicators that go beyond numbers (into social and environmental realms)
• User needs have an international focus
• Requires adaptability, willingness to let go of traditional skills and approaches
• Fundamental change in corporate governance and oversight (would companies or independent body appoint and pay for auditors?)
• In public interest world, need to consider new forms of assurance and how professional accountants can add value from a trust perspective
• Seen as an identifier, aggregator and validator of information to support decision making in a data-rich environment
• Importance of ethics and the human element in driving organizational strategy
• Expanded definition of stakeholders and fiduciary duty

WHAT METRICS MIGHT INDICATE WE ARE MOVING IN THIS DIRECTION?
• Anti-Populist movement
• Authoritarian regimes (Saudi, Russia) getting cold shoulder from international business and political leaders
• Increased enrolment in online courses/MOOCs
• Renewable energy commitments from tech giants and big business
• Increased philanthropy on part of one per cent
• Increased commitment to SDGs: investment in and revenue from SDG commitments increases
• Climate events impacting wide segments of population worldwide, including both rich and poor
• Reversal of current trends that tend to pull against scenario (Brexit, climate disasters, regionalism, bilateral as opposed to multilateral trade, weakening global institutions authoritarianism)
• Multilateral agreements
• Stronger global institutions
SCENARIO 3

TECH TITANS
(low social capital/embrace transformational change)

This is a world where a handful of global tech companies dominate the economic and political landscape, resulting in a dynamic, deregulated and insecure society.

1. IN THIS FUTURE, THE GLOBAL SITUATION IS INCREASINGLY FRAGMENTED: TRADE WARS ARE ESCALATING, PROTECTIONISM IS ON THE RISE, AND MIGRATION IS BEING CURTAILED WORLDWIDE. THERE ARE HIGH LEVELS OF POLITICAL MISTRUST, AS CHINA, THE U.S. AND EUROPE EACH CHART A DIFFERENT COURSE REGARDING REGULATION AND DATA GOVERNANCE.

2. BUT WHILE GOVERNMENTS TURN INWARD, TECHNOLOGICAL CHANGE CONTINUES TO TRANSFORM SOCIETY. ADVANCES IN ARTIFICIAL INTELLIGENCE, WEARABLE AND IMPLANTABLE TECHNOLOGY, 3-D PRINTING, AND AUTONOMOUS VEHICLES CREATE A “WILD WEST” ATMOSPHERE OF INNOVATION. DUE TO A LACK OF GLOBAL COHESION, PLATFORM TECH GIANTS (THE “TECH TITANS”) ACT AS INNOVATION INCUBATORS AND FUNDERS, AND MINIMAL REGULATION ENSURES THAT THESE LARGE PLAYERS RETAIN THEIR ADVANTAGES.

3. AUTOMATION, AI, AND THE “GIG ECONOMY” HAVE TRANSFORMED THE WORLD OF WORK; BY 2030, OVER 80 PER CENT OF CANADIANS ARE CONTRACT WORKERS, FREELANCERS, OR CONSULTANTS, CHANGING JOBS AND EVEN CAREERS BASED ON THE DEMANDS OF THE MARKET. GOVERNMENTS ARE TURNING INCREASINGLY TO PRIVATE COMPANIES TO PROVIDE SERVICES LIKE REVENUE ENFORCEMENT, URBAN PLANNING, AND HEALTH RECORDS, GIVING THESE COMPANIES INCREASING INFLUENCE IN THE POLITICAL SPHERE DUE TO THEIR ABILITY TO ACCESS VAST AMOUNTS OF DATA.
THE ECONOMY IS DYNAMIC AND VOLATILE, WITH DEMAND AND INNOVATION DRIVEN BY THE MOST AFFLUENT 20 PER CENT OF THE POPULATION. AT THE SAME TIME, INEQUALITY AND INSECURITY ARE HIGH: WORKERS WITH IN-DEMAND SKILLS ARE CHASED AFTER BY TECH GIANTS, WHILE LESS-SKILLED WORKERS SEE WAGES STAGNATE OR FIND THEMSELVES DISPLACED BY AUTOMATION. SINCE JOB REQUIREMENTS ARE CONSTANTLY IN FLUX, TRADITIONAL DESIGNATIONS AND MULTI-YEAR CERTIFICATION PROGRAMS ARE BECOMING LESS RELEVANT; WHAT REALLY MATTERS IS FLEXIBILITY AND THE ABILITY TO ADAPT QUICKLY TO NEW TECHNOLOGIES AND NEW ENVIRONMENTS. SUCH FAST-MOVING, COMPETITIVE, DISRUPTIVE ECONOMIC CONDITIONS HAVE SPARKED SOCIAL UNREST — AND WHILE TECH ALLOWS VIRTUAL COMMUNITIES TO BRING PEOPLE TOGETHER, IT ALSO ACCELERATES DIVISIONS.

IMPLICATIONS FOR ACCOUNTING:

• Accountants will need to respond to what Tech Titans perceive as important
• The power of a few large, very complex organizations (coupled with weaker regulatory systems) could lead to more fraud and corruption
• Greater diversity of users, comprising a handful of powerful tech titans and millions of smaller startups and freelance individuals
• Deregulated business environments create a different challenge for accountants — until now, most work has been in response to regulations
• An era of data explosion will require higher levels of analytical thinking and digital communication
• Standard — and some advanced — data functions and processes will be routinized through AI and other software
• Traditional accounting roles will face serious competition from software, AI, distributed ledgers and machine learning
• Blurring of roles between data scientists, computer scientists, engineers — where does this leave accountants?

WHAT METRICS MIGHT INDICATE WE ARE MOVING IN THIS DIRECTION?

• Participation in gig economy increasing
• Tech titans/private entities provide govt services
• Use of biotech and implantable technologies
• Tech players migrating into politics
• Online degrees
• Private providers of education
• New crypto currencies
• Closure of traditional manufacturers (GM)
• Movement away from traditional manufacturing centres
• Increase in web-based crowd funding
• Increase in robotics and AI
• Private projects mitigating climate change
• Insurers refuse to underwrite disaster risks related to climate change
• Self-service medicine
• Average lifecycle of publicly traded companies declining
• Increase in trade wars
• Increased hate crimes/distrust of foreigners
• Increase in sophisticated tech crimes

THERE HAS BEEN CONSIDERABLE EXPERIMENTATION AND INNOVATION IN CLIMATE-RELATED TECH, AND CANADA’S TRANSPORTATION AND POWER GRIDS ARE NOW OVERWHELMINGLY DISTRIBUTED AND RENEWABLE. THE NATION’S CARBON EMISSIONS ARE MOVING DOWNWARD, BUT GLOBALLY OVERALL WARMING IS LIKELY TO BE IN THE NEIGHBOURHOOD OF 2.5 DEGREES. TECH COMPANIES ARE ENGAGING IN AMBITIOUS “MOONSHOTS” (E.G. GEO-ENGINEERING) TO ADDRESS THESE RISING CLIMATE CONCERNS.
SCENARIO 4

MY WAY

(low social capital/resistance to transformational change)

This is a world where social cohesion and trust are in short supply, so people and communities turn inwards — and stay close to home — to protect their own interests.

IN THIS FUTURE, THE INTERNATIONAL LANDSCAPE IS FRAGMENTED, AND UNSTABLE, AS MULTILATERAL GOVERNANCE AND STANDARDS HAVE FALLEN AWAY. WORLD POWERS ARE HIGHLY POLARIZED BY ONGOING EVENTS LIKE THE BREAKDOWN OF LONGSTANDING ECONOMIC PARTNERSHIPS SUCH AS BREXIT, CRISSES IN GLOBAL FINANCIAL INSTITUTIONS, AND SURGES OF MIGRANTS ESCAPING DANGEROUS OR CORRUPT HOME COUNTRIES. DATA BREACHES AND CORRUPTION HAVE CREATED A PERVERSIVE ATMOSPHERE OF MISTRUST, IN WHICH GLOBAL TECH LOSES OUT TO LOCAL PLAYERS. THERE ARE FEW INTERNATIONAL STANDARDS; WHAT REGULATION THERE IS, IS LOCAL. CLIMATE AGREEMENTS HAVE COLLAPSED AS COUNTRIES ARGUE OVER FUNDING.

NATIONAL GOVERNMENTS ARE EMBRACING POPULISM, AND UNEQUAL ACCESS TO RESOURCES HAS LED TO CONFLICTS BETWEEN COUNTRIES, REGIONS AND CITIES ACROSS THE GLOBE. STATES WITH ABUNDANT RESOURCES LEVERAGE THEM, WHILE OTHERS STRUGGLE WITH SCARCITY, CORRUPTION AND CRIME. AS CLIMATE-RELATED DISASTERS CONTINUE TO MOUNT, NATIONS AND LOCAL COMMUNITIES HAVE BECOME EXPERT AT EMERGENCY RESPONSE, BUT THERE IS NO APPETITE FOR THE INTERNATIONAL COORDINATION NEEDED TO SYSTEMATICALLY ADDRESS THESE CRISSES.

AS A RESULT, INTERNATIONAL TRADE AND INVESTMENT GROW SLOWLY, AND PRODUCTIVITY IS DOWN. AS ECONOMIC SECURITY BECOMES MORE ELUSIVE, CANADIANS ARE STAYING IN THE WORKFORCE LONGER; YOUTH UNEMPLOYMENT AND INEQUALITY ARE AT RECORD LEVELS. MANY YOUNG PEOPLE ARE OPTING NOT TO INVEST IN DEGREES AND DESIGNATIONS AND ARE INSTEAD LOOKING TO CRAFTS AND TRADES. IN RESPONSE, UNIVERSITIES ARE RETOOLING THEIR OFFERINGS TO INCLUDE CURRICULUM FOCUSED ON APPLICATION WHICH INCREASINGLY USES APPRENTICESHIP MODELS AND EMBEDS REAL WORLD EXPERIENCE.
THE BRIGHTEST SPOTS IN THE ECONOMIC LANDSCAPE ARE IN LOCAL COMMUNITIES. BROADER SUPPLY CHAINS CONTINUE TO EXIST, BUT COMMUNITIES PREFER TO EXCHANGE GOODS AND SERVICES WITH THEIR CLOSER NEIGHBOURS. SECTORS THAT SERVE LOCAL NEEDS ARE THRIVING: AGRICULTURE, LIGHT MANUFACTURING, CONSTRUCTION AND DOMESTIC TOURISM.

WHILE INNOVATION HAS SLOWED IN WESTERN NATIONS, DEVELOPING COUNTRIES ARE STARTING TO LEAPFROG AHEAD, USING TECHNOLOGY IN UNIQUE WAYS TO FACILITATE A BETTER QUALITY OF LIFE IN SCHOOLS, HOSPITALS, WORKPLACES AND INFRASTRUCTURE WITHOUT BEING SLOWED DOWN BY LEGACY SYSTEMS.

IMPLICATIONS FOR ACCOUNTING:
- The shape of corporations’ change — big corporates still exist but mimic attributes of smaller businesses
- Fewer public companies, which could mean less need for CPAs
- Large banks and telcos face competition from smaller players
- Economy is more distributed, facilitating the development of more personalized services
- Tax dollars are collected and managed locally
- Trust is a rare and valuable commodity — are CPAs trusted, or seen as supports of a large institution?
- Business relationships are not commodity-based, instead focused on quality of overall relationship
- Governance falls away — accounting standards are defined by customer and community
- Could lead to less robust standards — but also to new opportunities
- Analytics and data focus on providing customized information, not formal reports — combination of internal/external reporting
- Role for a generalist ‘quarterback’
- Competition for CPAs from IT, fintech, engineers

WHAT METRICS MIGHT INDICATE WE ARE MOVING IN THIS DIRECTION?
- How much of food supply is grown locally?
- Pipeline issues between provinces (B.C. vs Alberta)
- Plants closing (e.g. GM)
- Rising cost of urban living
- Tensions at G20
- Conflict: challenges over Brexit, EU, Irish border, NATO; resources; climate disruptions
- Extremism in elections
- Decline in public capital markets in favour of private equity and crowdsourcing
- Trade stays stagnant or declines
- Less standardization of data governance
- Global or national growth/GDP declines
- Degree of trust declines (Edelman trust barometer)
- Data breaches in retail and social media
- How much power is generated off-grid
- Enrolment in traditional university degrees vs. apprenticeship models
- Levels of immigration, both legal and illegal
- Limits on migration; people stranded by closed borders
- Levels of inequality/social disparity
Workstreams

Each of the above scenarios represented a different set of considerations for the future of accounting, and each one suggested a set of responses CPAs could take today to prepare for the future. These are represented in Figure 3 below.

*Figure 3: How CPAs might prepare for each future today*

At the December Confirmation and Action Planning workshop, participants mapped the common ground across the four quadrants, consolidating their observations into eight potential workstreams that would help prepare the profession for a range of possible futures.

1. **Key skills/“Core & More”**

   **Goal:** Identifying – and as necessary redefining – the core skills of a CPA. The workstream aims 1) to make CPA more relevant to users, employers and society; 2) to make CPA more attractive to new candidates; and 3) to make the profession more rounded and multi-disciplinary through lifelong learning.

   *While tech will drive the future, it requires educated and broad-based human capital to create intellectual capital. This requires both global movement of people and lifelong education. Both are foundational principles.* —Digital roundtable participant

2. **Learning and professional development**

   **Goal:** To develop the future learning/professional development model that will guide the education of CPAs. Key steps include identifying and expanding points of entry into the profession; determining the need for multiple levels of proficiency and/or specializations; incorporating soft skills and creativity as well as technology like AI into learning; and exploring wider use of mentorships, internships and other forms of practical learning.
3. **Sandbox**  
**Goal**: Create a hub for experimentation and innovation built on sharing, open access and open source principles. The aim is to inspire, unite and support our members through innovation that helps to create a more nimble and adaptable profession.

4. **Value creation**  
**Goal**: Explore how societies, individuals, organizations and companies create, measure and report value – and understand the CPA’s role in and connection to value creation. Key tasks include: identifying the tangible and intangible drivers of value and how to measure them; understanding what information users need and how that will evolve as real-time decision-making and a holistic view of value take hold more widely; and understanding how to build critical mass and momentum around a new way of thinking about value.

> I think this era offers an opportunity to rebuild the profession around the broader base of value creation and multiple capital consumption – i.e. the total business model, versus our historic focus on financial accountability and compliance. —Digital roundtable participant

5. **Partnerships**  
**Goal**: Foster partnerships that allow CPAs to succeed in the marketplace. Key tasks include assessing existing affiliations as well as exploring new ones, while avoiding duplication, making efficient use of resources, managing costs around needed innovation, shifting to a collaborative (rather than a competitive) mindset, aligning roles with appropriate skills, and ensuring that CPAs have a voice.

6. **Governance structure**  
**Goals**: 1) to enhance the way the CPA Profession works together; 2) to make the decision-making process more nimble; 3) to build greater efficiency and agility in what we deliver to members; and 4) to create the capacity to drive more value to members.

7. **Data governance**  
**Goal**: Leverage our core attributes of trust and our existing public interest responsibility so that CPAs can provide both the rules for data governance and the assurance that they are being followed. The aim is to make data governance part of Canadian and international accounting standards.

8. **Stakeholder engagement**  
This is the communication and change management initiative that harnesses the inputs from all the other workstreams. The goal is to develop strategy and action plans that will inform members and markets of the urgency to drive change in the profession.

> As a young member of this profession, I'm incredibly encouraged by everyone that I've been able to interact with through this process. I've just been blown away by the diversity of viewpoints, the different perspectives. But I think the number one thing I'm really blown away by is how much progress we've made as a group in challenging our own assumptions, our biases, our viewpoints and just the broadening of perspectives. —Roundtable participant.
Creating a strategic direction

Overall, the Foresight project made an urgent case for change in the accounting profession. Participants came to recognize that many of the profession’s current systems were designed to meet the needs of the industrial age. As exponential shifts in technology, globalization, business models, geopolitics, and societal values and norms are reshaping the world, the profession must embrace transformational change now or risk falling behind, losing relevance amongst users, constituencies and future talent, and being replaced by competitors.

Participants in the roundtables were energized and eager to attack these challenges and help the profession move away from its traditionally reactive stance to a “permanently proactive” mode. They called for the profession to pivot to completely new ways of doing things, including measuring value beyond financial statements to capture societal expectations; harnessing the power of vast quantities of data to make decisions; establishing new models of governance and standards; and continuously equipping accountants with both core and soft skills.

A Strategic Direction workshop held in January 2019 represented the first step in turning these sweeping ambitions into actionable plans, providing the bridge between Phase One and Phase Two of the Foresight project. At this session, a smaller working group of roundtable participants tied together the learnings from both the digital and in-person roundtables to forge a new strategic direction for the profession over the next 10 years. There was not enough time in this workshop to deal with all the workstreams in detail, so partnerships and the sandbox were integrated into the discussion of governance and innovation and agility. Also, it was acknowledged that stakeholder engagement work would need to be undertaken by communications experts.

The overarching framework they developed, outlined below, will guide the workstreams and serve as an overarching direction for the profession:

**Goals and aspirations**

The accounting profession has always aspired to create value by assuring information, providing insight on performance, and advising with integrity. These three elements will remain central to the profession, but they take on new meaning in the information age:

- **Providing insight on performance**: Traditionally such insight has been mostly based on historical information, but as real-time information becomes more ubiquitous, value will come from providing real-time insight, and even foresight.

- **Assuring information**: Financial information is only one of the many types of information that will be important in future decision-making. To provide the value of assurance in the future, accountants must deal with a much broader range of information sources.

- **Advising with integrity**: This means providing advice not just to finance professionals, but to a broader range of decision makers within organizations.

Overall, participants felt a goal for the accounting profession should be to ensure that its evolving work is applied more broadly and appreciated by a broader section of society.
Strategic direction
To achieve this goal, the profession will need to change “where we play” and “how we play.”

When it comes to where we play, there are three primary areas where the profession can step forward:

- **Develop a new model of value creation**: Accountants have always measured and evaluated assets that contribute to value. However, in the digital age these assets are more likely to be intangible (brands, relationships or data) and/or non-financial (social or environmental value). Under current models, such assets are hard to measure. But given these assets’ increasing importance to our economy and society, accountants have an opportunity – and possibly the duty – to build models and frameworks capable of recognizing and measuring them. This is not a straightforward task, but it is essential if accountants are to retain and enhance their relevance to business and societal leaders.

In addition to measuring value created, accountants must provide periodic insights into an organization’s performance towards its goals. New and emerging technology combined with digitization of transactions will enable real-time reporting, decision making and support sophisticated modelling of likely future events. Consequently, new approaches to performance evaluation are necessary.

- **Partner on data governance and become the stewards of data integrity**: Data has always been central to successful economies, allowing companies to operate and review their performance in effective ways. In the digital age, data is more widespread and has become more valuable in and of itself. But at a time when data is so integral to business success and societal progress, there are few standards and frameworks to govern data integrity, security and application. Given its legacy in assurance and standard setting, the accounting profession is well placed to address key governance issues such as data location, format and extraction; IP strategy; and privacy. In a world of “fake news,” there is no more valuable work than to ensure that decision-makers can trust data.

When it comes to how we play, there are four critically important ways in which the profession must operate and behave, in order to effectively partner with its key stakeholders and maintain relevance:

- **Build relevant skills and capabilities**. In addition to new strategy, business modelling, partnering, communications, and valuation of intangibles skills, accountants must become digitally savvy. Digitization of transactions means that accountants will have to be much more familiar with data security, data analytics, structured and unstructured algorithms and real-time reporting. Accountants, like all professionals, need to be agile, willing and able to learn new skills that are suitable for the fast-changing times. In the coming years, many routine accounting roles and functions will be replaced by software and automation, but the human elements of advice, service and communication will become even more important. This means that accountants will need to work in concert with technology. This poses important questions for the profession. Firstly, what will accountants need to learn? What core skills will remain essential to the identity of an accountant, and what new capabilities must they offer to decision makers? Secondly, how will accountants conduct their learning? This may require rethinking the timing and structure of professional development.
• **Create an effective and flexible profession (governance structure):** In this rapidly evolving environment, traditional models of governance are strained, sometimes leading to damaging delays and constraints. If the profession is to become relevant to business and society beyond finance professionals, it is vital that it develop more effective and efficient ways of operating, while also allowing for experimentation. For example, the profession must explore how best to partner with non-members, other associated professions and international bodies. It might also establish an innovation hub (sandbox) to experiment with new technologies and methodologies, to ensure their success before rolling them out to the members.

• **Integrity, ethics and stewardship:** Successful economies and societies rely on trust, but mistrust of institutions and professions is at extraordinary levels. This is a problem for accountants, and accountants must work to remedy it. Accountants’ primary work product is trust, and they must ensure that integrity and ethical behavior continue to be fundamental to the profession. It is vital to keep ethics at the forefront of the CPA program, recognizing the difficulty of translating codes and standards through to actual behavior.

• **Agility and Innovation:** CPAs today need to be sufficiently agile to respond rapidly to changes in the internal and external environment without losing momentum or vision. Continuous, ongoing innovation is critical to maintaining long-term business agility. Accountants must be at the forefront of driving organization agility and innovation. Mirroring this, the accounting profession must also react quickly and innovatively to changes in the business environment ensuring the profession continues to be relevant, responsive, and to protect the interests of our members and the public.

**Priorities and next steps**
Next, participants worked to consolidate the potential workstreams identified at the Action Planning workshop and set priorities and a sequence for implementation to unfold over the next few years. Their recommendations include:

• **Value Creation and Data Governance** were identified as the two most critical priorities, and participants urged that they be acted on immediately as no current models exist. Given the ongoing transformative shifts in user needs, business models and societal expectations, combined with the “Wild West” of data, participants felt that these two workstreams offered the most fertile opportunities for the profession to demonstrate its worth and differentiate itself from potential competitors – both known and unanticipated.

• Another high priority was **Effective Governance.** The group saw this workstream as comprising two separate elements. The first is to establish a governance model for the next phase of the project to ensure that the stakeholders charged with overseeing the project have the direction and authority they need to govern the workstreams in meeting their intended objectives. The second is to arrive at an enhanced governance model for the overall profession – one that would provide oversight on its activities and help in implementing the new models and approaches generated by the various workstreams.

• The next priority was **Agility and Innovation.** Participants noted that the profession must foster an experimental culture and continuous learning mindset in order to become nimble in adapting to change. They called for the creation of an Innovation Hub that would operate in parallel with the other workstreams, envisioning this as a place for experimentation and pilot testing of workstream activity. Insights coming from this hub would enable the workstream participants to continuously refine and evolve their work.
• The **Skills and Competencies** workstream would draw on the work being done in other workstreams to identify new learning and attributes members of the profession will need in the future. It would start by identifying skills and competencies needed for existing CPA Canada projects, and later expand to reflect insights emerging from the output of other workstreams. These competencies will need to be updated on far more often than the current schedule of every two years to reflect the changing needs of users, the profession and society. A key competency that will be foundational to the profession’s efforts is the ability to effectively partner with its stakeholders and organizations outside the profession to accomplish all workstreams.

• In addition, participants identified the need for a workstream addressing **Trust, Integrity and Ethics**, as these values underpin the profession and should be incorporated into all workstreams.

Phase Two of the Foresight project will work to engage multiple stakeholders in implementing these workstreams.

The challenges facing the accounting profession – like those facing the wider world – are unprecedented and even existential. Yet as we stand at the crossroads, the Foresight process has shown that the profession is potentially well positioned to adapt to the changing needs of the future. If it can marshal the imagination to tackle the recommended areas above and the commitment to maintain the momentum generated through the roundtable process, the profession stands to not only thrive but to make a significantly greater contribution to society and the public good. With bold action and visionary leadership, accountants can become the indispensable advisors and stewards of the new digital economy.

> When we started this whole process, I’m going, “Please dear God, just get me to retirement so I don’t need to learn blockchain!” I gravitated to the slow and steady [scenario] — which was good, great — and it’s not gonna happen. Now I’m in the “bring it on!” category. —Roundtable participant