

# Charting the Course

Empowering Public Sector Financial Professionals  
through Technology Upskilling and Dynamic Expertise

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Welcome

# Objectives

What are our objectives for this presentation?

- Share themes and insights from research into the future of Finance and technology.
- Hear your views on how we can take full advantage of future technology opportunities.
- Discuss how we can grow and develop the dynamic expertise that we will need in future across the Function.

# Ongoing uncertainty

**Recent experiences demonstrate how uncertain the future is and how rapidly change can occur.**

**For the Finance function – the use of technology has always been on the horizon but now it has arrived and is fundamentally changing how we work and the work we do.**

- We are in the midst of major changes to how we live and work. Some changes include the fundamental pivot to virtual working, more online businesses, a **pandemic of course**, and cost of living challenges.
- We are in the most geo-politically unstable period since the Iraq invasion of 2003.
- **Financial markets** are susceptible to unexpected **shocks**, including increasing, disruptive **cyberattack**.

# What's around the corner?

Understandably, looking ahead is always tricky but there are some large trends we can see.

We'll take a look at these themes before discussing their impact on the Finance function.

- Advancing technology
- Growth of data
- Increased automation
- Digitalization
- Changing Finance roles
- Green Issues & Climate Change

# Technology

58% of CFOs believe that combining **state-of-the-art technology** with **process improvement** is a major focus for the future of Finance.

While views over the pace of change may vary, the expectation is that these **advances** are allowing the finance function to increasingly focus **time** and **effort** on **strategic** rather than **transactional** matters.

## Data & Systems

“The amount of data in the world is experiencing an annual growth rate of **approximately 66%**”  
- Agrawal et al, 2020

This rapid growth is highly applicable to finance teams. Ever **larger and more complex “big data”** needs to be distilled into a single source that provides **actionable information** and **insights** to the rest of the organization.

# Artificial Intelligence in the GoC

AI is not just about automating transactions and business processes. It's also about:

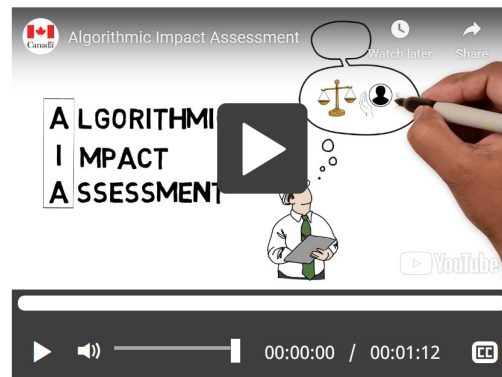
- Processing data and producing reports faster
- Improving decision making and forecasting abilities
- Conducting fraud detection and monitoring
- Creating entity resolution to connect data across organizations

Government of Canada's site for the *Responsible use of artificial intelligence*

AI procurement for a digital world



Algorithmic Impact Assessment



<https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai.html>

Generative AI: *AI that produces content such as text, audio, code, videos and images e.g.*

- ChatGPT
- Bing Chat
- GitHub Copilot
- DALL-E
- Midjourney
- Stable Diffusion

Data Presentation: *Not just Power BI e.g.*

- Tableau
- Dundas BI
- Jupyter
- Zoho Reports
- Visual.ly
- Sisense
- Plotly





# Rain Technologies



Budget Creation



Fund Centre Tracking



Dashboards & Analytics



Report Subscription



Forecasting



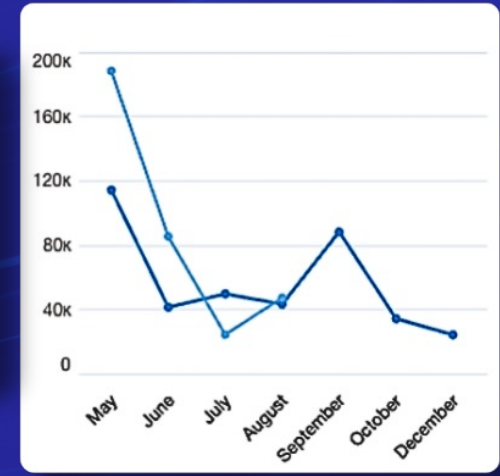
Collaborative Tools



- Workforce: \$400,000
- Expenses: \$100,000
- CAPEX: \$350,000

### Financial Situation by Cost Center

Cost Center Name ↑	Sum of Allocated Budget	Sum of Actuals	Sum of Budget Balance	Sum of Forecast	f <sub>x</sub> Surplus / Deficit
402075 - Governance	CAD 10.00m	CAD 1.43m	CAD 8.57m	7.53m	2.47m
403051 - CIO	CAD 3.30m	CAD 2.22m	CAD 1.08m	4.37m	-1.07m
403081 - President's office	CAD 2.35m	CAD 79.18k	CAD 2.27m	1.64m	703.45k
403085 - Financial Services	CAD 4.10m	CAD 2.80m	CAD 1.30m	3.90m	200.00k

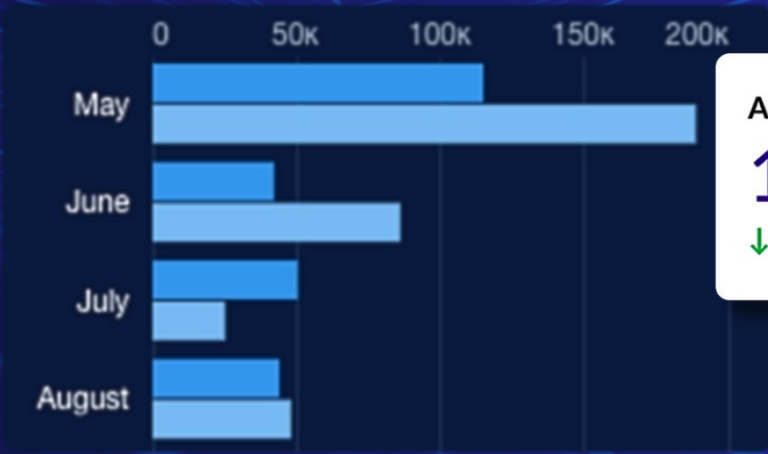


**Total Salary Cost**  
**\$660,000.00**  
 Next 12 months  
 ↑ 11% Since last period

**Average Salary**  
**\$50.77k**  
**Median Salary**  
**\$63.50k**

**Active FTEs**  
**10.5**  
 ↓ 1.5 FTE Since last month

**Total Employees**  
**13**  
 Retiring soon  
**1**

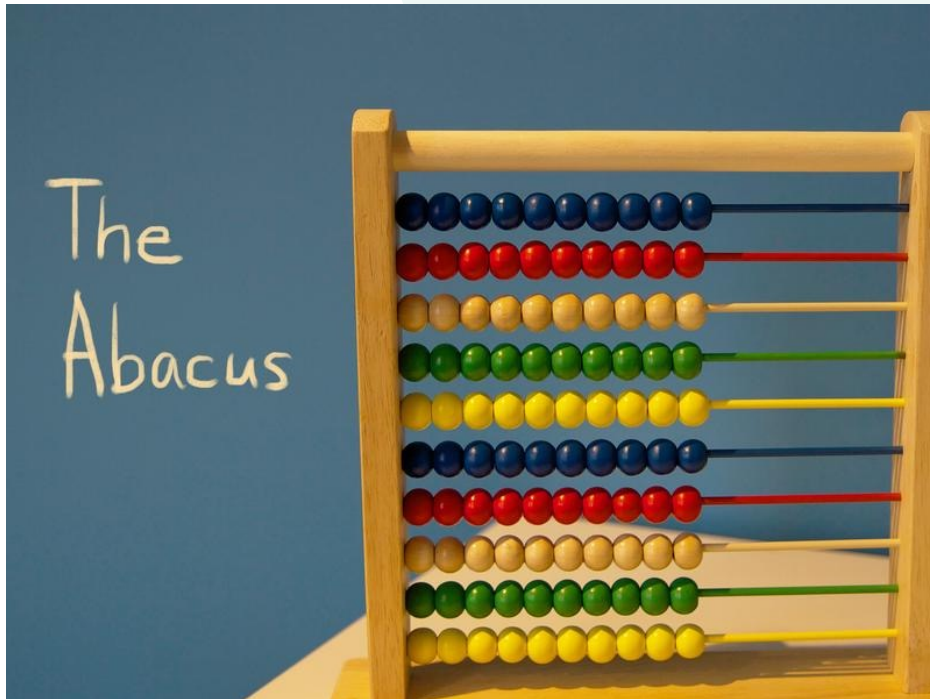


## Slido Question

**What non-financial data do you think Finance will need to use in the future?**

**What technology will change the Finance function?**

# People, Working Practices and Skills



**“Many Finance functions seem to be stuck in a rut. Teams manually produce the same reports, year after year – long after they’ve stopped being useful to management. Experts spend too much time making sure the numbers are right and not enough time figuring out what the numbers mean or what to do about them”**

***Roos et al (2020)***

The Finance function is recognized as central to an organization, but there is still a tendency to spend too much time working basic processes and reliability of reports.

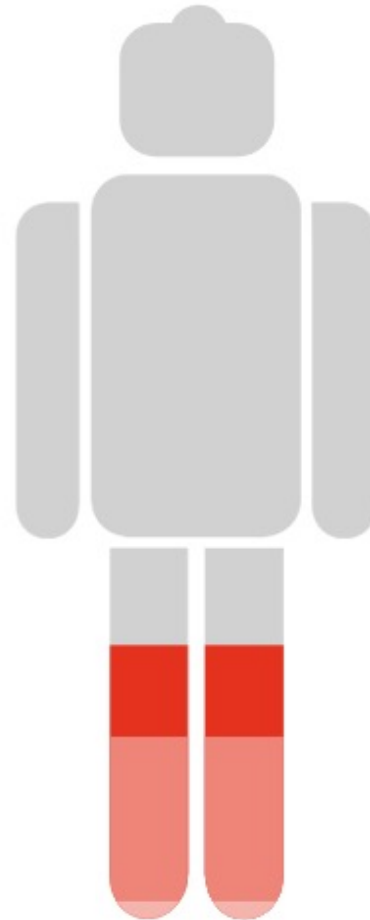
This is being compounded by the pace of technological change.

There is an imperative to reimagine the finance model that requires a “different type of finance professional”

# Automation

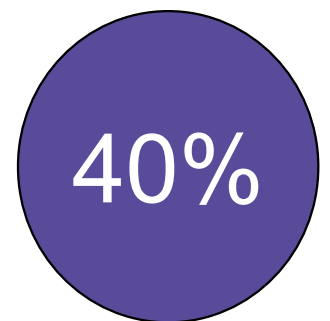
As technology advances, **almost a third** of current Finance jobs could be **automated**. Rather than this reflecting a decrease in Finance's role within an organization, it appears to highlight the opposite.

Indeed, the role of the **Finance** function in **digital organizations** has evolved from administrative into a **key driver of value generation** with the frontiers between finance and other functions increasingly blurring (Weffer & Luxembourg, 2020).



Estimate that as many as 40 percent of all jobs in Canada could be automated (fully or in some way).

– Bank of Canada





## Digital

Advances in areas such as **machine learning** and **artificial intelligence** can increasingly be applied to more complex tasks than the more **robotic transactional activities**.

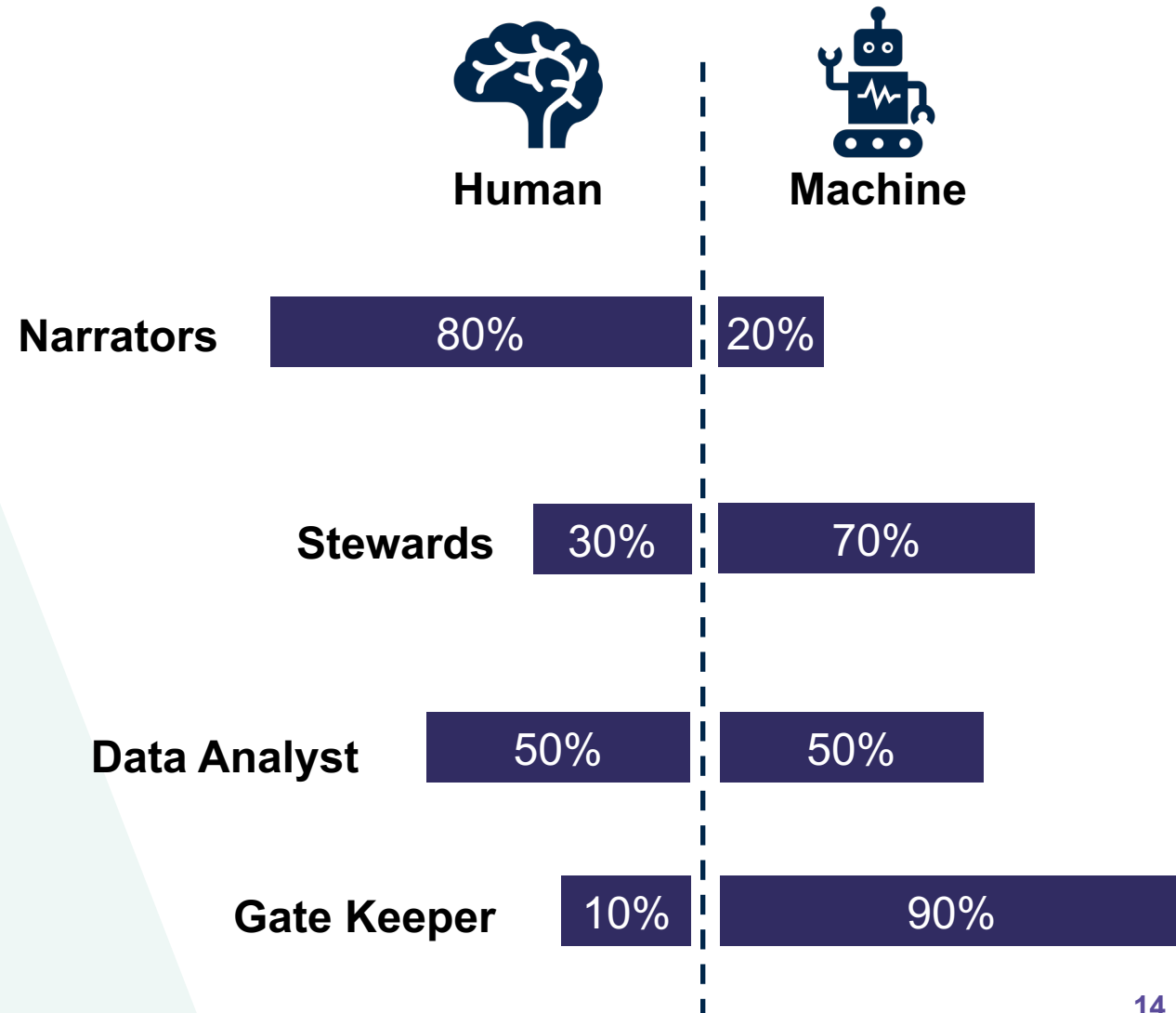
Coupled with **natural language generation** tools already being used to prepare draft commentary and analysis; this frees up time of skilled Finance staff.

# Human and Machine

As Finance roles are changing, so is the mix of human and machine activity. The traditional roles of the Finance function are changing - with different balances of human and machine activity needed.

The **Narrator** with deep stakeholder engagement, **Stewards** focusing on risk and quality, **Data analysts** integrating automation and machine learning; and the **Gate Keeper** of accurate financial information almost being completely replaced.

According to a Workday 2022 survey – CFOs are looking for candidates with AI and Machine Learning experience, coupled with analytics and data storytelling skills.



# Roles in Finance

**“We need a different  
type of finance  
professional...”**

- Agrawal, 2020

Global survey of finance professionals found **Accounting, Business Planning Analyst, Business Partnering** and **Strategist** roles are being elevated in importance.

New **Financial Data Scientist** and **Business Solutions Architect** roles are also increasingly valued as technology advances.

CIPFA research agrees, including shared pools of **analysts**, temporary **sprint teams**, and embedded **digital** skills, emphasizing a more **agile** and **flexible** approach.

The Finance professional of the future will need a combination of technical expertise and financial discipline.

## Slido Question

**With more data, automated processes and a changing human-machine activity mix...**

**...what Finance roles will be increasingly important in the future?**



# What's Next for the Financial Function?

Finance has a key role to play in the public sector of the future – helping create structure, understanding and decision-making. Organizations are facing new challenges e.g., the complexities of operating within the world of technological advancement, or how to address climate-change impacts on operations.

There are opportunities for our Finance function to play a more strategic, value-adding role through getting involved in areas where professional rules/standards are still being formed e.g., carbon credits, accounting for cloud computing, sustainability accounting.

Moving forward there is an ambition within the accountancy profession to develop new professional standards e.g., IPSAS's Advancing Public Sector Sustainability Reporting and its related move to developing climate related disclosures standard for the public sector; addressing how to treat accounting for cloud computing, software as a service etc.

There are a host of opportunities for Finance to drive change and add value in the organizations of the future.

# Discussion Questions

1. What theme do you think is most important when developing our skills and capabilities for the future?
2. How can we as individuals and departments take advantage of the opportunities ahead?
3. How can we prepare for the challenges?

# Leadership & Skills

**influencing**

*leadership*

process **Keeping score**

**Beancounter**

Shared vision

people

*reporting*

**Bookkeeping**

Change

Decision making

*Speaking truth to power*

**Not involved in policy**

stakeholders

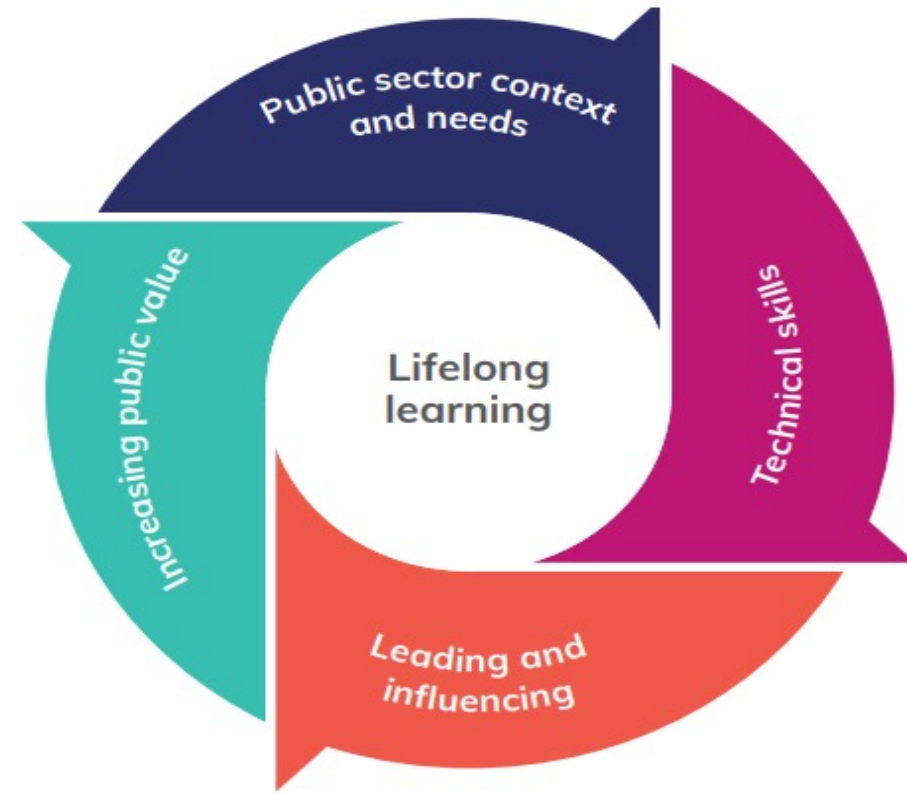
**partnering**

# CIPFA's Financial Management Maturity Model

Master Survey Score Matrix

Financial Management Styles	Management Dimensions			
	Leadership	People	Processes	Stakeholders
Delivering Accountability	★★★	★★	★★★	★★★★
Supporting Performance	★★★	★★★★	★★	★★★
Enabling Transformation	★★★	★★	★	★★★

# Key competencies for public sector finance professionals



- |   |   |  |   |
|---|---|--|---|
| <ul style="list-style-type: none"> <li>■ Political awareness</li> <li>Value for money</li> <li>Financial reporting</li> <li>Decision-making</li> <li>Accountability</li> <li>Governance</li> <li>Risk management</li> <li>Commercial understanding</li> <li>Counter-fraud</li> <li>Sector specific</li> </ul> | <ul style="list-style-type: none"> <li>■ Financial accounting</li> <li>Management accounting</li> <li>Audit</li> <li>Costing</li> <li>Procurement</li> <li>Counter-fraud</li> <li>Data</li> </ul> | <ul style="list-style-type: none"> <li>■ Strategy and governance</li> <li>Collaboration</li> <li>Business partnering</li> <li>Communication and impact</li> <li>Innovation and change</li> </ul> | <ul style="list-style-type: none"> <li>■ Stakeholder relationships</li> <li>Value for money</li> <li>Investment appraisal</li> <li>Strategic thinking</li> <li>Commercial understanding</li> <li>Benchmarking</li> <li>Delivery models</li> <li>Reorganisation</li> </ul> |
|---|---|--|---|



Thank you.