AI-driven finance in government

Think big, start small, and deliver value with trust

What's inside?

AI-driven finance transformation has become a strategic imperative for the public sector, requiring finance leaders to lead with clear purpose, practical execution, and measurable outcomes.

This perspective aims to provide a view on three areas to bring clarity to AI's opportunity:

Why

Today, public sector finance organizations must evolve to meet rising expectations for real-time insight, stronger controls, and better stewardship of public funds.

How

Lead AI transformation with a "think big, start small" approach grounded in trusted data, modern processes, and clear governance.

Examples

Explore real use cases for AI-enabled public sector finance teams.

Public sector finance is under growing pressure as citizens and leaders demand faster, more responsive, and data driven insight—yet many finance functions remain constrained by manual processes and backward looking reporting.

AI in public-sector finance is no longer an innovation agenda—it is a leadership and stewardship imperative. Finance leaders must now take ownership of how AI reshapes controls, financial insights, and decision-making, or risk becoming the bottleneck in government modernization. Those who act deliberately, thinking big while starting small, will define the next generation of public-sector financial stewardship.

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Why the public sector must embrace AI-driven finance transformation now

Governments, specifically their departments and agencies, stand at a pivotal crossroads, compelled to fundamentally rethink their approach to finance in response to mounting external pressures, rapidly emerging opportunities and pressure to not increase taxes to citizens, while keeping services intact, addressing structural deficits or using reserves dedicated to replacing aging infrastructure to cover current year expenses. The imperative for change has never been clearer or more urgent, and the time to act is now.

Rising expectations

Expectations have shifted in a digitally connected world: citizens and public service organizations are no longer satisfied with manual and time-consuming services. This extends to finance teams that can no longer simply produce backward-looking reports or static summaries of past financial performance.

There is a growing expectation for real-time, data-driven decision support that enables proactive and agile management of public resources and outcomes. With these increasing asks for financial information, the finance department is not able to rise to the expectations of new information while continuing to report what they have delivered in the past.

In addition to increasing requests for historic information, finance professionals are increasingly expected to be strategic partners, providing timely insights that inform policy decisions and drive better public value. This represents a significant shift in the role of finance, demanding new capabilities and a more forward-looking mindset. Due to state of the financial information, such as a lack of centralized accounting, common processes, manual work, and composition of talent—finance is not able to rise to this challenge.

Regulatory awareness is foundational to responsible AI

Public sector organizations must remain informed of their government's evolving laws and policies on AI to ensure appropriate oversight, transparency, and accountability in AI enabled financial processes.

Regulatory pressure

Regulatory requirements are intensifying across the public sector. New and evolving standards demand greater transparency, more robust internal controls, and higher levels of accountability. These requirements are not only about compliance, but also about building public trust and demonstrating accountability for the stewardship of public funds. AI can provide significant enhancements in these areas, automating control activities, improving accuracy, and making it easier to track and report on financial transactions. By leveraging these technologies, public sector organizations can not only meet regulatory financial reporting expectations but also set new benchmarks for accountability and transparency.

Future-proofing the public service

Early adopters of AI in finance, both within the public sector and in leading private organizations, are already achieving substantial benefits, such as faster close cycles, improved accuracy, and more agile decision-making. This raises the bar for everyone else, making it essential for public sector finance functions to keep pace or risk falling behind. Embracing AI now is not just about catching up with peers; it is about modernizing the finance function to ensure it remains resilient and relevant in the face of ongoing digital disruption. Investment in these capabilities delivers long-term value for money, ensuring that public resources are managed as effectively and efficiently as possible, and that organizations are prepared to adapt to future challenges.

AI tools, supported by human review, are increasingly built into mature, market-ready solutions that can be tailored to public sector organizations

Talent optimization

A shift in the talent model is required to make this change. Traditionally, finance processes within government have relied heavily on manual and transactional activities. Looking ahead, the required skillsets will shift markedly from routine data entry towards roles as strategic advisors utilizing data insights. Realizing the advantages of AI necessitates that governments first redesign their finance functions by establishing standardized procedures and robust data collection practices prior to appropriate AI implementation.

Moreover, public sector entities often encounter considerable competition in attracting skilled finance professionals who tend to be highly sought after and possess numerous career opportunities elsewhere. Leading candidates are increasingly interested in leveraging progressive finance practices and contributing to strategic decision-making that enhances outcomes for citizens.

The future composition would likely include less data entry personnel and more knowledge workers who can be strategic thinkers and catalysts for data driven decision making. Furthermore, establishing a state-of-the-art, data-driven finance function that proactively serves the program areas and promotes efficiency across government will enhance the appeal and satisfaction of public sector finance roles, thereby supporting both talent acquisition and retention.

Technological readiness

Whether governments are seeking new technology as a means to improve processes or as a result of old technology sunsetting, new technology cannot solely be a “lift and shift” or doing the same processes with a new technology. New technology should not be about replacing one tool with another. It’s about driving efficiencies and strengthening processes; and the ROI of technology needs to be part of the business case.

The technology itself has reached a level of maturity and accessibility that makes transformation both feasible and urgent. More and more, AI tools, supported by human review, are increasingly built into mature, market-ready solutions that can be tailored to public sector organizations. The barriers to adoption are lower than ever before, and the risks associated with implementation can be diminished significantly with the latest learnings and best practices. This creates a unique window of opportunity for public sector finance teams to lead change and drive innovation.

Impact on finance

The impact of these changes on the finance function is profound and far-reaching. By leveraging AI and automation along with effective guardrails and human reviews, public sector finance teams can dramatically improve the efficiency and effectiveness of core accounting and control activities. This, in turn, enables finance professionals to shift their focus away from routine, transactional work and toward activities that drive business value and support strategic growth. The result is a finance function that is more agile, responsive, and capable of supporting the organization’s broader mission to deliver better outcomes for citizens.

For the public sector, this transformation is not just an opportunity—it is a necessity in order to remain relevant, resilient, and effective in a rapidly changing environment. By embracing the challenge, finance teams can move beyond transactional work to become true strategic partners, driving value, supporting better decision-making, and ensuring the long-term sustainability and impact of their organizations for the benefit of all stakeholders and the citizens they serve.

How finance can drive AI transformation

As public sector organizations recognize the urgent need to modernize, finance functions are uniquely positioned to lead the charge in AI transformation. The finance department's central role in managing data, ensuring compliance, and supporting strategic decision-making gives it a strong foundation for driving meaningful change. However, success in this area requires a thoughtful and structured approach—one that balances ambition with practical steps, and innovation with the core principles of financial stewardship and integrity.

Planning for transformation: think big, start small

The journey toward AI transformation in finance begins with a comprehensive and forward-looking plan. Leaders should not be afraid to envision a future where AI fundamentally reshapes how finance operates—enabling real-time insights, predictive analytics, and smarter decision-making. At the same time, it is essential to ground this vision in reality by starting with manageable, well-defined projects. Adopting a "think big, start small" mindset allows finance teams to build early momentum and demonstrate tangible results, which are critical for gaining organizational buy-in and support. Early success creates a culture of innovation and continuous improvement, while also helping to identify and address any unforeseen challenges before a broader implementation.

Why many AI-in-finance initiatives fail in government

The scale of change required within the finance function is substantial. Numerous leaders have initiated efforts to integrate AI into finance, yielding varied outcomes. Where such initiatives are unsuccessful, it is frequently because the emphasis is placed on technology rather than financial objectives, AI enhancements are applied to inefficient processes and incomplete data, or the improvements are regarded purely as an IT project rather than a strategic finance transformation.

Identifying finance tasks for transformation

A crucial step in the transformation journey is the careful identification of finance activities that are best suited for AI enhancement. Repetitive, manual tasks such as financial reporting and processes leading to financial reporting such as invoice processing, expense management, reconciliations, and data entry often consume significant time and resources while offering limited value. These areas represent low-hanging fruit for automation, delivering quick efficiency gains and reducing the risk of human error. Beyond these obvious candidates, finance leaders need to understand how it was done before is not how it will be done in the future. Finance leaders need to focus on what their policies and controls require, how does the technology work and completely redesign the future of work.

Furthermore, it is important to take a broad view and seek out tested use-cases from other organizations, both within and outside the public sector. By learning from the experiences of others, finance teams can avoid common pitfalls, leverage proven solutions, and accelerate their own transformation journeys. Benchmarking against industry leaders can also help to set realistic goals and measure progress over time.

Implementing new technology when processes are not yet ready can worsen existing issues

AI is not the responsibility of the CIO as it applies to the use within finance

Finance Leaders need to understand the types of AI available, where it is used and what needs to be true for strategies to work. While the CIO can enable AI transformation, finance Leaders need to lay the groundwork for how AI can be leveraged within finance.

Finance professionals are responsible for use-case prioritization based on financial results, control assurance, data standards, process readiness, and value optimization. IT supports these efforts with platforms, security, integration, and vendor management.

It is crucial to carefully consider the current state of the finance function. Implementing new technology when processes are not yet ready can worsen existing issues, increase costs, and decrease the process's effectiveness. It is essential for finance leaders to understand AI as it relates to the finance function and the types of technology available, stable and proven in the market so they can transform their function in a cost-efficient manner with proven technologies that will result in cost savings and what needs to be true in order for these technologies to work. Developing a plan for change can go a long way.

Setting your finance AI maturity path

To be able to articulate their desired outcomes and get the expected benefits, finance should focus on the following 4-stage model to identify a path to AI maturity. Finance should identify projects to prioritize based these desired outcomes and the AI tools available:

- Automate (transactional efficiency)
- Assure (controls, data, standardization
- Augment (insight, forecasting, variance explanation)
- Advise (scenario modeling, policy trade-offs)

This model will provide finance with a listing of use-cases, inform those prioritization use-cases and measure impacts of use-cases on finance outcomes.

Finance should focus on a 4-stage model to identify a path to AI maturity

Keeping it simple, maintaining control

While the potential of AI transformation is vast, it is important not to overcomplicate initial efforts. Within the plan, early projects should focus on simplicity, scalability, and delivering clear, measurable value. By starting with pilot initiatives that are easy to implement and monitor, finance teams can learn quickly, adapt to feedback, and build the confidence needed for larger-scale transformations.

Finance must remain vigilant in maintaining its core priorities: ensuring a single source of truth for financial data and upholding rigorous control over financial information. These principles are non-negotiable, as they provide the foundation for trust, credibility, and effective decision-making within the organization. AI tools and automation solutions must be integrated in a way that strengthens, rather than undermines, the integrity and reliability of financial information.

In the beginning focus on simplicity, scalability, and delivering clear, measurable value

Unlocking value: repurposing finance time

When AI transformation is executed thoughtfully, the benefits extend far beyond improved efficiency. By automating routine and repetitive tasks, finance professionals are freed to focus on analysis, strategic guidance, and delivering actionable insights to leadership. This shift not only enhances the value that finance brings to the organization, but also makes finance roles more engaging and fulfilling—helping to attract, develop, and retain top talent.

Moreover, by leveraging AI-driven insights, finance can play a more proactive role in shaping organizational strategy, identifying risks and opportunities, and supporting better financial decisions. This evolution positions the finance function as a true business partner, contributing directly to the achievement of organizational goals and the delivery of better outcomes for citizens.

By leveraging AI-driven insights, finance can play a more proactive role in shaping organizational strategy

Finance functions can unlock new levels of efficiency, insight, and strategic value

Driving to the future

By doing this correctly, government finance can achieve faster closings, reduce manual reconciliations, enable finance staff to focus on exceptions, and enhance credibility with central agencies and auditors.

In summary, finance has a pivotal role to play in driving AI transformation across the public sector. By planning thoughtfully, targeting the right tasks, leveraging the most effective tools, and keeping core financial priorities at the forefront, finance functions can unlock new levels of efficiency, insight, and strategic value. Done right, this transformation not only modernizes finance operations, but also elevates the entire organization—enabling it to thrive in an increasingly complex and data-driven world.

Data and Canadian sovereignty

Through this process, it is critical that solutions and third-party vendors remain at home. This is a fast-emerging industry and the IP developed through government transformation must remain in Canada. The application of AI within finance needs to be an at home solution to ensure the Canadian economy builds the IP within this industry to ensure we retain leadership within the application of AI within government and create new industries for Canada to compete on the world stage.

The public sector needs to ensure anyone with access to the largest organization in Canada are owned by Canadians to protect our data and the future resiliency of our country.

Examples

Delivering on the why and how comes to life through targeted AI applications that generate value, enhance control, and enable better decision-making.

Embedded generative AI for financial analysis

Modern operating systems and enterprise platforms increasingly include built in generative artificial intelligence (GenAI) capabilities. When enabled and governed by the organization, these tools can operate within a closed and controlled environment, using only the organization's internal data. For example, finance teams may use GenAI to analyze historical financial information, such as prior year budgets, actual results, and variance explanations, to identify trends, summarize key drivers, and generate draft insights for management review. Because the tool is restricted to internal datasets and subject to access controls, it can enhance efficiency and analytical depth while maintaining data confidentiality and governance.

Machine learning and exception validation as forms of artificial intelligence

Artificial intelligence also includes machine learning and rule based exception validation techniques that do not rely on generative text outputs. Machine learning models can be trained on historical transaction data to recognize normal patterns and flag unusual items for further review. Similarly, exception validation tools use predefined rules and learned behaviors to identify anomalies, outliers, or control breaches (for example, transactions outside expected thresholds or inconsistent with prior activity). These approaches represent established and widely used forms of artificial intelligence that support risk management, quality control, and decision making without replacing human judgment.

Continue the conversation

Sarah Ban
Provincial Government Lead Business Partner
Deloitte Canada
Tel: 416-993-2396
Email: sban@deloitte.ca

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