



Public finance management in the age of AI

How public finance leaders can lead the next era of public value



Contents

Executive summary / What you'll find inside	<u>3</u>
The moment	<u>4</u>
Six shifts reshaping public finance	<u>6</u>
1. Budgeting for what changes lives	
2. Hard-wiring cross-cutting priorities	
3. Resource scarcity as a forcing function	
4. The return of fiscal discipline	
5. AI in core finance operations	
6. Treasury becomes a digital hub	
How work is changing	<u>10</u>
The operating model	<u>11</u>
Your 12-month playbook	<u>12</u>
Closing thought	<u>13</u>
Selected references and further reading	<u>14</u>
Sources	<u>15</u>

Executive summary

The public finance revolution

Public finance is in the middle of a quiet revolution. The pressures you face, heavier debt, leaner workforces, more demanding citizens, and a faster pace of change, are not going away. What is new is that you finally have tools that can help you keep up. Artificial intelligence is increasingly moving beyond pilots and being deployed in production environments across public finance organizations. Early implementations across worldwide regions have already reported improvements in areas such as forecasting, fraud detection, and operational efficiency.¹ Organizations that act now may shape how public funds are planned, allocated, and monitored over the coming decade.

This paper is a peer-to-peer briefing. It distills global trends, real outcomes, and a practical playbook designed for finance leaders who are ready to lead, not to wait. You will find patterns that work, safeguards that help keep public trust intact, and a step-by-step approach to move from ambition to scaled impact.

With the right strategy, skills, and safeguards, finance leaders can make every public dollar count and be seen to count.

What you'll find inside

-  Six global shifts reshaping budgeting and treasury and what they mean for your office
-  Lessons from frontier ministries already scaling AI in production
-  A step-by-step playbook to move from idea to impact in twelve months
-  Guardrails for responsible, transparent, accountable AI in public finance

The moment

Why is it different now?

Every generation of finance leaders inherits a familiar set of problems: limited resources, rising expectations, and the need to plan in the dark. What is different today is the convergence of these three forces that, together, make this moment a true inflection point.

Pressure has never been higher

Global public debt sits at record levels. Aging populations, climate transition costs, and geopolitical shocks are all competing for the same fiscal space. Citizens want services that are faster, fairer, and more transparent. Parliaments want evidence, not narratives. Auditors want traceability. And ministers want answers yesterday.

Frameworks have caught up to ambition

The OECD's Performance Budgeting Framework (2024)², the IMF's renewed focus on Medium-Term Fiscal Frameworks³, and the G7 Toolkit for AI in the Public Sector (2024)⁴ all point in the same direction: Budgeting must shift from inputs to outcomes, planning must look multiple years ahead, and AI must be deployed with transparency at its core.

Technology is increasingly demonstrating real-world effectiveness

Machine learning models have been reported in studies (for example, OECD⁵ and IMF⁶ analyses) to reduce revenue and GDP forecast errors in certain scenarios compared to traditional econometric approaches. Deployments of agentic AI assistants embedded in everyday tools report measurable time savings for officials in routine tasks. Anomaly detection catches what manual sampling never could. Evidence is increasingly emerging from real-world deployments rather than only experimental environments; it is in production budgets and treasury operations across the world.



Advancing public finance with sovereign cloud capabilities

Modern sovereign cloud capabilities provide public finance leaders with a trusted foundation to transform how governments manage public funds, combining secure data residency, strong encryption, and policy-driven controls that help to ensure financial data can be protected when implemented with appropriate controls, policies, and governance, compliant with national regulations while benefiting from cloud-scale innovation. This enables finance, treasury, tax, and audit authorities to modernize core operations such as budgeting, revenue collection, and reporting, through unified data and advanced analytics, with the potential to improve transparency, support faster decision-making, and strengthen fiscal discipline when effectively implemented.

At the same time, sovereign architecture supports the secure handling of highly sensitive workloads, including regulatory reporting, audit trails, and enforcement activities, enhancing accountability and citizen trust. Ultimately, this approach allows governments to balance innovation with control, unlocking AI-driven insights and operational efficiency while safeguarding sovereignty, reducing risk, and improving the overall effectiveness of public financial management.



Signals from early adopters

- United States: The Government Accountability Office reported more than \$162B in improper payments in fiscal year 2024.⁷ The U.S. Treasury's AI-driven "Do Not Pay" tools recovered or prevented over \$4B in a single year, a six-fold improvement.
- United Kingdom: A 20,000-person Microsoft 365 Copilot trial across government found employees saving on average 26 minutes a day, with more than 70 percent reporting reduced menial workload.⁸
- Indonesia & France: AI tools have flagged 30 to 50 percent more anomalies in budget submissions and at-risk municipalities than manual review ever could.⁹



Six shifts reshaping public finance

From inputs to outcomes

Shift 1

Budgeting for what changes lives

The biggest reframing in modern public finance is also the simplest: stop budgeting for what you spend and start budgeting for what you achieve. The OECD's 2024 Performance Budgeting Framework codified what frontier ministries have been doing for years: linking funding decisions to measurable outcomes such as employment, health, or emissions reduction, and using evidence to allocate, monitor, and adjust.

New Zealand's Wellbeing Budget requires agencies to report progress against social outcome indicators.¹⁰ France links ministry budgets to performance contracts. Across the OECD, dedicated outcome-monitoring units are emerging, often paired with AI analytics that map every line of spending to a strategic goal. The ministries making fastest progress chose a platform that unifies budget, outcome, and operational data in one governed environment, so AI has the full picture from day one, not a patchwork of point integrations.¹¹



What this means for you

Define a short list of outcomes that matter to your government and stick to them across budget cycles

Invest early in the data that proves whether outcomes are met. Without it, performance budgeting struggles to translate into measurable results

Use AI to translate dense submissions into clear evidence-based summaries your team can act on



Shift 2

Hard-wiring cross-cutting priorities

More than 20 countries now apply climate budget tagging.¹² Over 80 jurisdictions practice gender-responsive budgeting.¹³ From Ireland and Morocco to South Korea and Indonesia, ministries publish climate annexes alongside their annual budgets. Why? Because citizens expect priorities like sustainability and equity to be more than slogans. They expect them to be embedded in every funding decision.

Natural language processing now scans thousands of pages of budget proposals in seconds, checking whether agencies have aligned spending with stated priorities. France's Ministry of Finance uses Natural Language Processing to verify climate and social tagging across new spending.¹⁴

AI is designed to support policy judgment and can extend the capacity of finance teams when applied appropriately. Embedding priorities at scale, however, requires a platform where tagging logic, audit trails, and AI governance live together, so cross-cutting compliance is enforced continuously, not verified after the fact.

Important goals used to be siloed. Now they can be hardwired into every line of the budget.



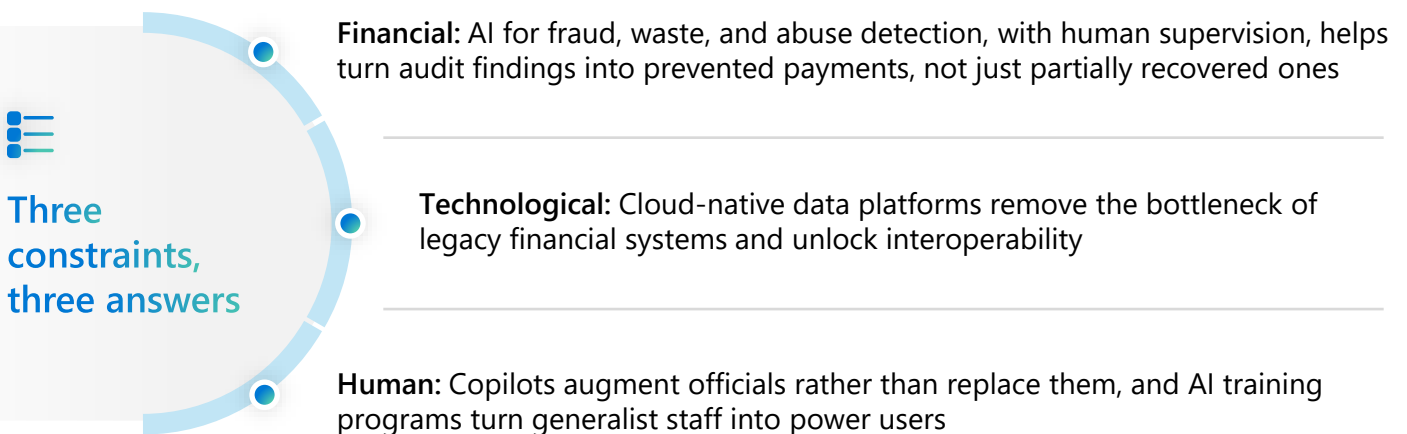
Doing more with less, with discipline

Shift 3

Resource scarcity as a forcing function

Finance ministries everywhere are being asked to deliver more with less. Aging infrastructure, rising service demand, and shrinking civil service headcounts are not cyclical pressures; they are structural. The question is no longer whether to adopt AI, but how fast and how to do it responsibly.

In the United States, the scale of improper payments alone, \$162B in a single fiscal year, illustrates how much value is left on the table by manual processes. Brazil¹⁵ and India¹⁶ have used AI to monitor subsidy and pension disbursements, with reported reductions in leakage in specific implementations. South Korea launched a four-month AI training program for 350 civil servants.¹⁷ The United Kingdom partnered with technology leaders to skill thousands of public sector employees on AI. The common thread across these examples is AI that is woven into the tools finance teams already use, reducing adoption friction and delivering value within existing workflows rather than requiring a parallel system.



Shift 4

The return of fiscal discipline, supercharged by AI

The IMF¹⁸ and OECD¹⁹ have observed a clear post-pandemic pattern: Governments are returning to Medium-Term Fiscal Frameworks with three- to five-year ceilings and tighter top-down expenditure control. AI has the potential to support stronger fiscal discipline by improving forecasting and analysis capabilities. The UK's Office for Budget Responsibility experiments with ML-based tax models.²⁰ Chile's Budget Office uses AI to simulate debt trajectories under multiple interest rate scenarios.²¹

With better forecasting comes better discipline. With better discipline comes credibility with markets, with parliaments, and with citizens. The challenge is transparency. Black-box models will not survive parliamentary scrutiny. Frontier ministries are investing now in explainable AI so that every projection can be traced, defended, and trusted. Those that pair explainable forecasting with quarterly iteration cycles, reviewing model accuracy against actual outturns, build the institutional trust that sustains fiscal discipline beyond any single political cycle.

AI in operations and the digital treasury

Shift 5

AI is increasingly adopted in core finance operations

The OECD's 2024 survey found that most member countries now run at least one AI or machine learning application inside their finance ministry or treasury.²² The use cases are no longer experimental: revenue forecasting, real-time budget monitoring, fraud detection, citizen questions & answers, and parliamentary briefings.

France's AI system for monitoring local government finances flags 30 percent more at-risk municipalities than manual methods.²³ Indonesia's Ministry of Finance reduced anomaly identification time in provincial budget submissions by 50 percent with an AI virtual assistant. Brazil's Federal Audit Court deployed an AI assistant to monitor public procurement and shares the lessons across Latin America.²⁴ Notably, the gap between pilot and production can be reduced when AI applications run on the same sovereign, compliant infrastructure as core financial systems, eliminating the re-platforming cost that stalls most scaling efforts.

Shift 6

Treasury becomes a digital hub

Countries have already started the digital treasury transformation. The U.S. Executive Order 14247, signed in March 2025, mandates a full federal shift from paper-based payments to electronic disbursements and collections.²⁵ Brazil and India have rapidly expanded government-to-citizen payment platforms with AI-driven identity verification and anomaly monitoring.²⁶ The Bank of England estimated in 2025 that better cash forecasting could free 15 percent of the UK government's cash buffer without raising default risk, freeing billions of pounds redeployed to public use.²⁷

Records modernization is the quiet partner of payment modernization. The UK's HM Treasury invested \$1.75M to apply AI and automation to twenty years of financial records, a project squarely about audit readiness, compliance, and institutional memory.²⁸ Achieving this vision starts with unifying your data estate: When payments, cash positions, and records share a single governed foundation, every downstream capability, from fraud screening to real-time forecasting, compounds rather than fragments.



The treasury of the future



Instant, digital, fraud-screened payments with anomaly checks before money leaves the door



Continuous cash forecasting that blends bank feeds, revenue, and obligations into a real-time view



Records and audit trails that are searchable in seconds and resilient against cyber and operational risk

How work is changing

From dashboards to decision intelligence: The rise of conversational finance

A fundamental shift is underway in how public finance leaders operate—moving from static dashboards to dynamic, intelligence-driven decision environments. For two decades, dashboards defined insight delivery; today, they are only the entry point. The new interface is conversational and agentic: Analysts, auditors, and policy leaders engage directly with data through natural language to generate real-time answers, predictive insights, and decision-ready outputs. This shift is not incremental—it is beginning to shift productivity expectations in some public sector environments. Large-scale deployments are already demonstrating measurable impact: Government organizations report substantial daily time savings per user and significant reductions in manual, repetitive work, freeing capacity for higher-value analysis and policy design. More importantly, the value is translating into tangible fiscal and societal outcomes, from millions in cost savings to faster, evidence-based investment decisions and improved citizen experiences.

The numbers tell the story. Redmond, Washington State has unlocked \$3.6M in identifiable savings.²⁹ Public Investment Corporation can make 2X faster investment decisions, from 12 months to 6 months.³⁰ Australian Financial Complaints Authority has enabled the citizens to save 2 days due to automation of complaint referrals.³¹ Dominican Republic Customs cut bank reconciliation time by 71%.³² The UK Government's 20,000-person trial of Microsoft 365 Copilot reported an average of 26 minutes saved per day per user and over 70 percent of participants said the tool reduced menial workload meaningfully.⁸ The Municipality of Breda in the Netherlands gave 3,600 employees AI copilots and recorded productivity gains of up to 28 hours per employee per month.³³ These examples illustrate early-stage deployments that indicate broader potential as adoption scales.

How officials use AI in practice

Task	How AI Helps
Draft fiscal memos and ministerial briefs	First draft in seconds, grounded in cited internal sources
Reconciling budget submissions across agencies	Automated cross-checks for duplications, ceilings, and tags
Summarizing parliamentary hearings or reports	Searchable summaries in minutes, not days
Variance analysis and forecast updates	Continuous, explainable updates with risk bands
Citizen-facing budget Q&A	Multilingual, plain-language assistants grounded in official content

The operating model

Building the AI-ready finance function

Technology alone does not transform a ministry. The institutions leading this shift are doing four things in parallel: Standing up new units, modernizing infrastructure, investing in people, and codifying the guardrails for AI. Each reinforces the others.

New units, new roles

Chief Data Officers, dedicated data science branches, and central AI governance units are now common. France's DGFIP launched a Digital Transformation Unit weighted 20 percent on technical upskilling and 80 percent on change management, a deliberate signal that the human side of transformation is the harder side.³⁴ The UK³⁵ and South Korea³⁶ have established central AI governance units to define standards across departments. India's Comptroller and Auditor General run a centralized Data Analytics Centre to mine public datasets for anomalies.³⁷

Modern infrastructure as the foundation

Eighteen OECD countries are mid-flight on major Financial Management Information System modernizations. South Korea's dBrain+ platform unifies budgeting, accounting, and cash management on a single source of truth.³⁸ The UK's HM Treasury is migrating two decades of records to a modern cloud platform with AI-powered classification.³⁹ The pattern is consistent: Legacy silos out, interoperable cloud platforms in.

Skills before scale

South Korea partnered with KAIST on a 4-month AI program for 350 civil servants.⁴⁰ Australia's Department of Finance built a Data Analytics Branch focused on continuous upskilling.⁴¹ The World Bank's GovTech Global Partnership and the OECD's Senior Budget Officials network host regular knowledge exchanges.⁴² The recipe is simple: Hire data talent, train existing teams, and create communities of practice that keep learning alive.



Codifying guardrails: Responsible AI

- More than 60 countries have endorsed the OECD AI Principles including widely recognized principles such as transparency, human-centeredness, and accountability.⁴³
- Canada's Treasury Board Directive on Automated Decision-Making (2019) requires an Algorithmic Impact Assessment for every system that influences public decisions.⁴⁴
- The G7 Toolkit for AI in the Public Sector (2024) provides shared guidelines on explainability, privacy, and risk management.⁴
- Audit offices in the Netherlands, Finland, and the UK now publish methods for auditing government algorithms.⁴⁵

Your 12-month playbook

Six steps from ambition to impact

Every leading ministry started somewhere small. The pattern of success is consistent: Pick the right first moves, build muscle, scale what works. Here is a playbook informed by examples across multiple geographies and adapted for finance leaders ready to act.

1

Start with outcomes and data. Define a short list of measurable policy outcomes drawn from frameworks like the OECD's.¹ Then conduct a Public Financial Management data inventory — budget, ERP, HR, grants, revenue, outcomes. Establish governed access and lineage in preparation for scaling AI.

2

Run two fast pilots. One in budgeting (a program-level scenario exercise with AI-summarized submissions and duplication detection) and one in treasury (digital disbursements for a targeted benefit or grant with fraud screening). Prioritize opportunities that can yield measurable results like time saved, accuracy, or improper payment reduction.

3

Lead with people, not technology. Identify internal champions, design a clear change management plan, and align leadership, communications, and training. Establish internal AI usage policies early in the process, before scaling deployment. The right technology partner can not only provide tools, but also enablement programs and structured learning paths that support finance staff in developing AI-related skills and confidence.

4

Put AI in the hands of finance teams. Free capacity for analysis and oversight by giving every analyst access to AI assistants that can draft, reconcile, and summarize. Pair the rollout with role-specific training so that adoption sticks.

5

Build responsible AI guardrails. Define security and responsible AI practices, align with data residency requirements, classify sensitive fiscal data, and implement controls for protection and auditability. Make explainability a default, not a feature. Responsible AI is strongest when it is inherited from the platform layer, pre-built classifiers, content filters, and audit logging.

6

Scale what works and iterate quarterly. Embed quarterly portfolio reviews that combine performance, citizen feedback, and fiscal outturns. Extend anomaly detection to procurement and payroll and integrate with audit case management. At scale, the differentiator is a platform that spans budgeting, treasury, audit, and citizen engagement within a consistent governance and security framework, so quarterly iteration compounds gains across the full fiscal lifecycle.

Closing thought

Make every dollar count, and be seen to count

Public finance leaders have a significant opportunity to rewire budgeting and treasury around outcomes, agility, and trust. The technologies are here. The patterns are demonstrated. Public sector organizations on every continent from Columbus to Seoul, from London to Cairo, from Brasília to Wellington, show strong emerging patterns from pilot to scaled adoption.

The work ahead is not primarily technical. It is institutional. It is about defining outcomes that matter, building data foundations that hold up, equipping people to do their best work, and committing to AI guardrails that earn citizen trust. AI will not replace the judgment of finance leaders; it has the potential to amplify and free your teams to focus on the questions that only humans can answer.

With responsible AI and a relentless focus on measurable results, finance ministries and treasuries can make every public dollar count and be seen to count.



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