White Paper

# A guide to modernizing treasury operations with AI-driven insights

Unlock smarter decisions with the neural treasury

Corporate treasurers are operating in one of the most complex environments in decades, navigating market volatility, geopolitical uncertainty, and immense pressure to achieve more with fewer resources. Many treasury departments are constrained by legacy systems and manual processes that are costly, risky and ill-equipped for modern business demands.

This white paper explores the transformative potential of artificial intelligence (AI) to address these challenges and fundamentally reshape how treasury functions operate. We'll examine the evolution from traditional, fragmented treasury models to a centralized, AI-driven framework often referred to as the "neural treasury."

By leveraging AI for advanced cash flow forecasting, intelligent fraud detection, and centralized liquidity management, organizations can move beyond reactive, manual tasks. This shift empowers treasury teams to focus on strategic, value-added activities, turning the treasury department from a cost center into a strategic partner for the business. This paper provides actionable insights and a clear framework for treasury leaders to embark on their AI transformation journey, highlighting the quick wins and long-term ROI associated with adopting these powerful new technologies.

## The modern treasurer's dilemma

Today's corporate treasury departments face a convergence of challenges. The landscape is marked by unprecedented market volatility and geopolitical instability, creating an environment where financial resilience is paramount. Simultaneously, internal pressures are mounting. Treasurers are tasked with optimizing liquidity, managing risk and supporting growth, often with constrained budgets and limited technical talent.

Many organizations continue to rely on legacy systems, spreadsheets and manual processes. These fragmented approaches are not just inefficient; they introduce significant risks, including:

- **Liquidity blind spots:** Limited real-time, global visibility into cash positions makes it difficult to unlock idle cash or anticipate funding needs.
- **Increased fraud exposure:** Manual payment processes are vulnerable to sophisticated fraud schemes, which are increasingly powered by technology.
- **Inability to respond to shocks:** Without agile, data-driven systems, organizations struggle to react quickly to market disruptions or internal financial crunches.

While interest in modernization is growing, treasury projects often compete with revenue-facing initiatives for priority and funding. However, the rising threats of fraud and the persistent pressure of market volatility are making technology adoption less of a luxury and more of a necessity. AI and the concept of a neural treasury offer a path forward, fundamentally altering how treasuries operate and deliver value.

## The treasury maturity spectrum: Where do you stand?

The evolution of treasury technology can be viewed along a maturity spectrum, illustrating the journey from manual operations to advanced, AI-enabled solutions.

- **Pre-digital:** Characterized by significant reliance on manual processes, spreadsheets, and fragmented, siloed systems. This stage is inefficient, risky, and offers limited strategic insight. A surprising number of organizations, perhaps as many as one in three, still operate at this level.
- **Digitalization:** Involves the adoption of basic treasury management systems (TMS) to automate routine tasks. While an improvement, systems may still be decentralized and lack full integration.
- **Centralization and integration:** Treasury departments consolidate processes and systems onto scalable, secure technology platforms. This stage enables greater control and visibility over global operations.
- **AI-enabled (neural treasury):** The most mature stage, where AI-driven tools are layered on top of a centralized foundation. This allows for predictive analytics, intelligent automation, and enhanced decision support.

The most significant gap observed in the market today is between organizations stuck in manual, pre-digital approaches and those that have embraced scalable technology platforms. The latter are primed to adopt AI and unlock its full potential, transforming their decision quality, risk posture and overall strategic impact.

## The AI-driven transformation: From typical to neural treasury

What does an AI-driven transformation look like in practice? It represents a fundamental shift from a decentralized, reactive model to a centralized, strategic one.

| Characteristics | Typical treasury department (pre-AI) | Neural treasury department (AI-enabled) |
|---|---|---|
| **Operations** | Decentralized, fragmented processes for liquidity and payments | Centralized control and visibility over global liquidity and payments |
| **Staff focus** | Over-capacity staff focused on manual, non-value-added tasks | Efficient, lean staff focused on strategic, value-added analysis |
| **Risk profile** | High-risk and prone to errors, fraud and liquidity shortfalls | Risk-averse, with automated controls and predictive risk mitigation |
| **Strategic focus** | Analytical but not strategic; focused on daily "blocking and tackling" | Highly strategic and analytical; focused on optimizing enterprise value |

The journey from left to right on this chart is about more than just implementing new software. It requires a strategic reassessment of the entire treasury operation. For many, this means centralizing payments, standardizing processes, and improving data aggregation before layering on AI technologies.

## Building the business case for AI in treasury

The challenges facing modern treasurers – volatility, liquidity optimization and fraud – are also the strongest arguments for AI adoption. According to the 2025 PwC Global Treasury Survey, 74% of organizations are either expanding or actively using AI, with a particular focus on machine learning and predictive analysis to enhance their operations. Yet, despite this momentum, only 26% of respondents described their AI capabilities as moderately or very mature. The remaining 74% are at various stages of adoption, with 42% engaged in pilot programs and 32% still in the early phases of development and implementation. These findings suggest a significant gap between interest in AI and maturity in AI adoption, underscoring the need for organizations to invest in scalable solutions and expertise to effectively harness the full potential of AI. For treasury departments, this is an opportunity to transform core functions, improve strategic forecasts and strengthen compliance, leveraging AI to gain a competitive edge in an increasingly dynamic business environment.

The key to building a successful business case, however, lies in demonstrating tangible ROI.

- **Quick wins and immediate ROI:** The most accessible benefits often come from AI-based cash flow forecasting. By improving forecast precision, organizations can immediately reduce borrowing costs and unlock idle cash, delivering a measurable return.
- **Long-term enterprise value:** The most significant long-term ROI is found in risk mitigation. AI-driven tools that prevent fraud and anticipate liquidity crunches protect the organization's enterprise value in ways no manual process can. AI can peer around corners and identify threats before they materialize.

The excitement for this technology extends to the highest levels of the organization. CFOs recognize the evolutionary leap that AI represents, and expectations are high for technology partners to deliver meaningful solutions.

## Key applications of AI in corporate treasury

Where should treasurers focus their initial AI adoption efforts? Three core areas stand out as prime candidates for transformation.

### 1. Large language models (LLMs) for treasury

The widespread consumer adoption of tools like ChatGPT has set a new standard. Users increasingly expect more intuitive, conversational interaction from their enterprise software. LLMs tailored for treasury, such as the FIS® Treasury GPT solution, are changing the game.

Key benefits:

- **Simplified system usage:** Users can ask natural language questions to configure the system, run reports or get support, reducing reliance on help desks or third-party consultants.
- **On-demand expertise:** An LLM can provide instant access to best practices, policy examples (e.g., "Show me a sample FX risk management policy"), and even insights based on the company's own stored policies.
- **Accelerated onboarding and training:** New team members can get up to speed faster by interacting directly with the system.

This technology transforms a TMS from a tool that requires training into a partner that provides guidance.

### 2. Core treasury functions

AI can enhance certain traditional treasury functions by adding a layer of intelligence and predictive capability.

- **Liquidity management:** AI-based cash flow can analyze historical data, seasonality and market trends to support more precise projections. This can help treasurers improve visibility into global cash positions and inform projections of future needs with greater confidence.
- **Payments processing:** AI-driven anomaly detection can serve as a powerful defense against fraud. The system can learn normal payment patterns and can help identify or block transactions that deviate from the norm – such as a payment to a new beneficiary in a high-risk country or an unusual payment time. This adds a critical layer of security and control.
- **Risk management:** AI models can continuously analyze market data to predict shifts in foreign exchange or interest rates, helping treasurers make more effective hedging decisions. Beyond financial risk, AI can also be critical for assessing and mitigating cyber risk, an area where vendor capabilities and limitations should be closely evaluated.

### 3. Centralized data aggregation and reporting

Historically, data aggregation has been fragmented. Treasury teams have struggled to pull together data from accounts receivable, accounts payable, various business units, and banks. This can lead to siloed reporting and an incomplete picture of the organization's financial health.

AI-powered platforms are designed to break down these silos. The goal is to create a single, more centralized dashboard for the CFO and treasury leaders. This visual interface would provide a holistic view, integrating:

- Global cash positions
- Cash flow forecasts
- Days Sales Outstanding (DSO) from receivables
- Pending high-value payments
- FX exposure reports

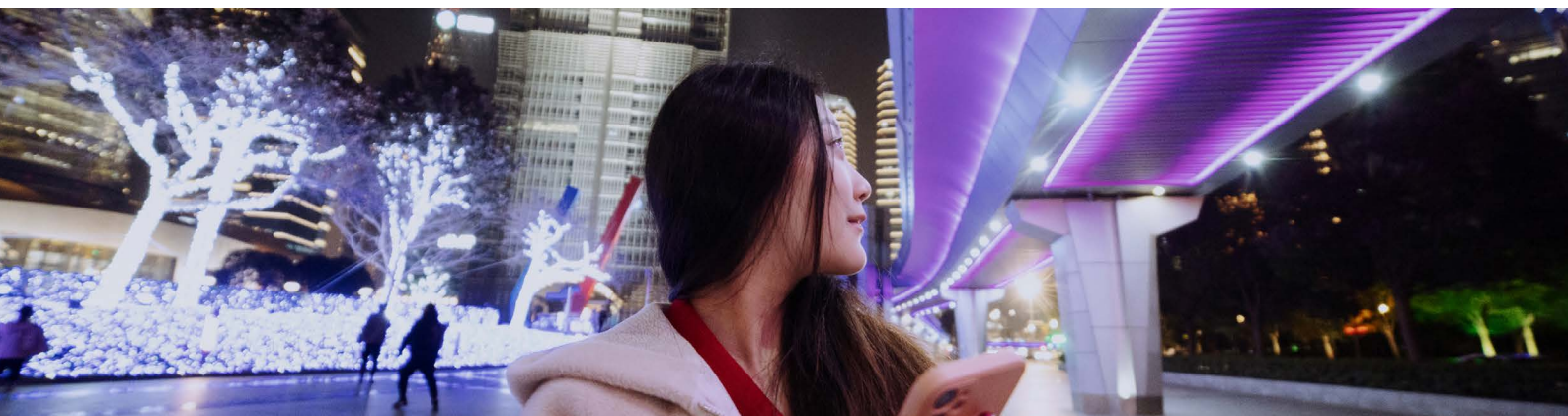
By unifying this data, AI can help leaders to move from fragmented data points to more comprehensive and timely financial insights, all in one place.

## The AI-empowered treasurer: Human judgment, AI-powered guidance

What does the future role of the treasurer look like? The AI-empowered treasurer is one who has leveraged technology to automate the aggregation of data – from banks, markets and internal systems – to have a single source of truth. This centralized, intelligent data-driven foundation allows them to make faster, more efficient decisions on funding, trading and risk management.

A common question is whether AI will make treasury functions fully autonomous. While it's plausible that a bot could one day be trusted to perform routine tasks like paying down debt or investing excess cash, that is not the reality today.

The current, and most valuable, role of AI is to support – not replace – human decision-making. Treasury leaders are seeking AI for guidance and improved analytical power. They need tools that can analyze vast datasets, identify anomalies and recommend actions. The final judgment and strategic oversight remain with the human expert. The future of treasury is not about handing control over to a "bot"; it's about forging a partnership between human intelligence and AI's analytical power to achieve superior outcomes.



## Your path to AI transformation

Adopting AI is no longer a distant vision; it's a present-day necessity for treasuries aiming to be strategic partners to the business. The transition from manual, reactive processes to more predictive AI-supported operation represents a transformational change that requires planning and governance.

Actionable steps to begin:

1. **Assess your maturity:** Determine where your department sits on the treasury maturity spectrum. Evaluate your reliance on manual processes and spreadsheets.
2. **Conduct a full reassessment:** Before adopting AI, evaluate your operational structure. You may need to centralize payments, consolidate banking relationships, or standardize processes to fully realize the benefits of technology.
3. **Identify quick wins:** Start with high-impact areas that deliver immediate, measurable ROI. AI-based cash flow forecasting is an excellent starting point for most organizations.
4. **Prioritize risk mitigation:** Focus on using AI to support fraud detection and risk management. Protecting enterprise value delivers immense long-term returns and strengthens the business case for further investment.
5. **Partner with the right experts:** Work with technology providers and consultants who understand both the technology and the strategic nuances of corporate treasury. Seek partners who can guide you through the transformation, from operational reassessment to technology implementation.

By embracing an AI-driven strategy, treasury departments can move beyond the daily grind of manual tasks. They can unlock new efficiencies, secure the organization against emerging threats, and provide the strategic insights needed to navigate an increasingly complex world.

**Learn more**

**Money at rest. Money in motion. Money at work.™**

FIS helps you unlock rapid treasury insights, reduce risk and make strategic decisions. Our technology powers the global economy across the money lifecycle.

### Money at rest

Unlock seamless integration and human-centric digital experiences while ensuring efficiency, stability, and compliance as your business grows.

### Money in motion

Unlock liquidity and flow of funds by synchronizing transactions, payment systems, and financial networks without compromising speed or security.

### Money at work

Unlock a cohesive financial ecosystem and insights for strategic decisions to expand operations while optimizing performance.

fisglobal.com/contact-us  linkedin.com/company/fis  x.com/fisglobal



Advancing the way the world pays, banks and invests™