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SPOTLIGHT

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This Spotlight highlights the importance of investing in modern treasury software built with microservices and cloud-native principles as a cornerstone for achieving agility in the face of uncertainty and solidifying treasury's role as a strategic partner to the CFO.

Navigating Tomorrow's Treasury: Accelerating Data Use and Facilitating Resilience to Drive Agility in Uncertain Times

July 2025

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Introduction: Navigating Modern Treasury

The contemporary treasury function operates within an environment of unprecedented dynamism. Accelerating data flows, increasing geopolitical volatility, economic disruption, and complex regulations can create formidable challenges.

Treasury's influence extends far across the enterprise and can impact every business unit's liquidity, capital, and risk. Its decisions underpin a company's ability to innovate and manage financial health. Driving agility in the face of uncertainty is a must for treasuries to respond quickly to change and manage volatility across financial markets. To achieve this goal, treasuries need to abandon the traditional mindset and combine the latest cloud technology with the appropriate features of a treasury management solution. This paper details modern architectural components for adaptability and demonstrates how this transformation can empower efficiency and foresight in a world demanding instant adaptation and agile decision-making.

AT A GLANCE

WHAT'S IMPORTANT

Modernizing treasury infrastructure by combining public cloud, microservices, and APIs together with the appropriate feature/function set is a strategic imperative for agility amid uncertainty.

KEY TAKEAWAYS

- Modern infrastructure helps drive treasury agility and strategic partnership.
- Embrace cloud-native technology for a more resilient, future-ready finance function.

The Pressure Cooker: Why Traditional Treasury Infrastructures Are Failing

The sheer velocity and volume of modern financial data, coupled with persistent economic volatility and increasing regulatory demands, expose vulnerabilities in traditional treasury infrastructures. Many systems are rigid, aging pipelines overwhelmed by data, severely hindering agility. These inefficiencies can ripple across the entire organization, impacting business unit cash, financial and credit risk management, and strategic planning.

Using cloud-based or SaaS technology alone is no longer sufficient. Treasury teams must examine the underlying architecture of legacy cloud systems. Many of these legacy platforms were built for batch processing and may be unable to meet today's demands for real-time data updates that are measured in seconds, not hours. In many cases, their inflexible architectures make rapid adaptation to market shifts or regulations arduous, undermining agility. Batch processing can create latency, obstructing timely visibility into global cash and liquidity. Decisions based on stale information can erode accuracy, increase risk, and compound the difficulty of making agile choices for the enterprise.

These legacy environments can also be difficult to integrate. Many systems operate as isolated islands, communicating via bespoke, brittle interfaces that are costly to build and maintain. This fragmentation can impede a unified financial view and slow critical processes like intercompany lending, payment initiation, and consolidated reporting, affecting the company's operational cadence. In an era where treasury must act as a strategic advisor and true partner to the CFO, legacy cloud and even on-premises infrastructures can prevent the agility needed to address sudden market shifts or to integrate innovative fintech solutions, leaving organizations reactive.

The Modern Treasury Blueprint: Architecting for Agility and Resilience

To navigate accelerating data and unprecedented uncertainty, treasury should embrace a modern architectural blueprint. This approach leverages public cloud infrastructure, microservices, containerization, and advanced APIs to help forge an agile and resilient treasury that can serve as a stronger partner to the CFO.

Public Cloud Infrastructure: The Scalable and Secure Foundation for Agility

Migrating to the public cloud using cloud-native technology can help transform IT into a more dynamic, elastic utility. Cloud providers often offer immense scalability and can instantly expand resources on demand. This inherent elasticity can provide the flexibility to cope with unforeseen data spikes or operational changes. Global reach helps provide consistent performance, offering greater agility in global treasury management for the enterprise. Public cloud together with public cloud–native technology can also provide more advanced security and reduce IT overhead.

Microservices Architecture: Deconstructing for Agility, Expedited Capabilities, and Streamlined Upgrades

Microservices break traditional cloud or SaaS applications into small, independent services. Benefits of this approach include:

- **Automatic scaling:** This capability can provide treasuries with the flexibility to more seamlessly integrate and handle data from additional sources, such as ERPs, as business needs evolve. It makes it possible for treasuries to more efficiently monitor liquidity, manage risks, and adapt swiftly to changes in company strategy, enabling dynamic support for strategic decision-making in an increasingly complex financial landscape.
- **True real-time features:** Microservices optimize for expedited data processing (e.g., instant payments, continuous liquidity forecasting, or risk management), helping transform reactive treasury into a more proactive, informed function, capable of dramatically boosting agility across the company.
- **Lightweight and low-risk cloud operations support continuous innovation:** Independent microservices allow more agile development. New features or security patches can update only specific services, helping eliminate costly systemwide downtimes common with traditional monolithic SaaS applications. This allows for continuous agility.

- **Automated execution of upgrades (CI/CD):** Modularity pairs with DevOps and CI/CD pipelines, helping automate testing and deployment. This can reduce risk, accelerate new functionalities, and allow the system to leverage the latest code, which can provide much-needed agility in operations. Should one service encounter an issue, the rest of the treasury operation can remain unaffected, enhancing resilience.

Advanced APIs: Weaving the Fabric of Real-Time Integration for Responsive Action

APIs are the essential communication layer for more seamless, expedited data exchange. Unlike fragile point-to-point integrations, advanced APIs provide standardized, more secure connections for data flow from ERPs, banks, and market providers. For treasury, this can mean real-time visibility, automated reconciliation, faster payment processing, and quick integration of new financial services, enabling more agile data-driven responses for the enterprise.

Strategic Imperative: The Role of Cloud-Native Treasury Software

Unlocking modern infrastructure's power requires cloud-native treasury software. For CFOs, this is a strategic imperative, helping build treasury resilience amid data acceleration and uncertainty, improve agility, and foster meaningful partnerships.

Cloud-native software embraces microservices and API-first design, helping deliver modular functions for more rapid feature deployment that can include fast-paced capabilities. This helps bring together rich features and functions to better prepare treasury for the future and the improved capacity and scalability to be able to use these functions with growing data and/or new integration points, helping drive value for treasury while maintaining high agility.

Operating in the public cloud, these solutions leverage elastic scalability, robust security, and cost efficiency to facilitate the handling of increasing data volumes without heavy capital expenditures. This often reduces the total cost of ownership (TCO). Designed for continuous innovation via CI/CD, cloud-native platforms can deliver frequent, seamless updates. This helps sustain agility, a vital advantage in managing complexity, directly supporting the CFO's agenda. Choosing cloud-native software can empower treasury to proactively create value, solidifying its role as a strategic partner.

Unlocking Strategic Advantage: Benefits of Combining Robust Features with a Public Cloud–Native Infrastructure

The strategic investment in modernizing treasury infrastructure can yield powerful benefits by directly addressing accelerating data and uncertainty while driving greater agility. This helps transform treasury into a proactive, strategic enabler of business value for the entire company. The benefits include:

- **Enhanced real-time visibility and control:** A modernized infrastructure can centralize and integrate timely data, providing faster, more comprehensive insight into global cash, liquidity, and risk exposures. Decision-makers can have a live view of financial health, enabling rapid, informed responses to market shifts. This helps eliminate critical blind spots and enhance financial control, fostering strategic agility for the CFO and broader leadership team.
- **Unparalleled operational agility and efficiency:** Microservices' modularity and APIs' more seamless connectivity help streamline treasury operations. Manual tasks can be automated and executed more promptly, accelerating payment processing (benefiting suppliers and partners), optimizing intercompany settlements, and speeding reconciliation. Reduced manual intervention helps free staff for strategic analysis, fostering a more agile and responsive financial department that can better support companywide operations.

- **Superior scalability and future proofing for adaptive agility:** Cloud-native infrastructure can provide greater elasticity and easier scaling for data volume or global expansion. This helps eliminate costly over-provisioning and enable treasury to absorb accelerating data flows without degradation. The API-first, modular design helps prepare treasury for the future by making new technology integration faster and less disruptive, allowing its adaptive agility to benefit the organization's growth trajectory.
- **Optimized resource allocation and cost efficiency for agile capital deployment:** Leveraging cloud resources and automating processes can lead to significant cost efficiencies. Reduced reliance on on-premises hardware, lower maintenance costs, and optimized resource utilization contribute to a more favorable TCO. More informed rapid decisions on cash deployment and investment help improve financial performance by increasing returns and helping optimize working capital, allowing for agile capital deployment that directly supports the company's strategic initiatives and profitability.
- **Leveraging innovative technology:** Managing large amounts of data and leveraging scalable technology are essential for effectively adopting innovative technologies such as AI, which relies on extensive data sets to identify patterns, generate insights, and support predictive analysis. Cloud-native public cloud treasury technology makes it possible for treasurers to manage growing data volumes and scale their operations as needed. This helps treasuries harness AI for smarter decision-making and improved operational efficiency through data-driven insights, trend identification, and more precise risk prediction. Scalable technology also helps businesses respond more effectively to growing data and evolving market needs, enhancing agility and maximizing the value potential of AI-driven innovations.

Navigating the Transformation: Challenges in Modernizing Treasury Infrastructure

While the strategic imperative and benefits of modernizing treasury infrastructure are compelling, the journey has significant challenges. Enterprises must proactively address technical, operational, and organizational hurdles to achieve successful adoption and help unlock the potential of public cloud, microservices, and APIs, particularly in achieving agility and companywide strategic partnership. Challenges include:

- **Managing complex data migration and integration from legacy systems:** Extracting, cleansing, and migrating large volumes of data from disparate and often proprietary legacy systems are major hurdles. Legacy systems often lack modern API capabilities, necessitating complex custom connectors. Maintaining data integrity and accurate mapping during migration is paramount, as flawed data can undermine the infrastructure and impede agility, potentially affecting the reliability of data across the organization.
- **Ensuring robust security and navigating compliance in the cloud:** Migrating sensitive financial data to the public cloud raises legitimate security and compliance concerns. While cloud providers can offer advanced security measures, it remains the organization's responsibility to implement robust access controls, encryption protocols, and continuous monitoring. Operating within a cloud-native, API-driven landscape requires careful navigation of the General Data Protection Regulations (GDPR) and other complex global regulations. This demands specialized expertise and ongoing diligence while also supporting operational agility and helping protect the company's overall financial integrity.

- **Overcoming organizational inertia and addressing skill gaps:** The shift to a modern agile treasury infrastructure represents a profound cultural change. Resistance to new ways of working, fear of job displacement, or lack of understanding can create internal friction, undermining efforts to build agility. Investing in training and strategic hiring is essential to foster an agile mindset that spans across the entire finance function and beyond.

Key Trends Shaping Treasury's Modernization Journey

The strategic imperative to modernize treasury infrastructure is a proactive response to powerful, ongoing trends helping fundamentally reshape the global financial landscape. These underscore the urgency for treasury to embrace public cloud, microservices, and APIs in order to remain relevant and resilient, with embedded agility, and to step up as a central strategic partner. Trends to watch include:

- **The accelerating shift to real-time financial operations:** Finance teams are under growing pressure to deliver instant payments, on-demand global cash visibility, and near-continuous reporting. Meeting these expectations requires infrastructure capable of processing large volumes of data with low latency — often within milliseconds — making traditional batch-based systems increasingly inadequate. To keep pace, organizations must adopt API-driven platforms that enable rapid responsiveness and enterprisewide transparency.
- **The expansion of the API economy and open banking:** Standardized APIs are helping transform financial interactions. Open banking is helping dismantle bank-corporate data silos, enabling timely information and payment initiation. This trend calls for API-first treasury infrastructures to capitalize on this interconnected ecosystem, making it possible to enhance integration agility that can benefit all business units reliant on financial data.
- **Intensified focus on data governance and advanced analytics:** The volume and critical nature of financial data demand impeccable data governance. Modern infrastructure helps provide clean, accessible data via APIs and cloud-native platforms. This helps empower advanced analytics, enabling deeper insights into financial performance, bottlenecks, and opportunities with increased analytical agility that directly supports the CFO's strategic leadership.

Considering Fidelity National Information Services

Fidelity National Information Services (FIS) offers a comprehensive suite of treasury solutions designed to enhance financial operations for corporate treasurers and CFOs. Its portfolio includes its public cloud–native and SaaS-based treasury management solutions, payment hubs, and Swift services. FIS solutions are "secure by design" to meet the rigorous demands of the banking industry and the regulatory standards required by the company and its clients.

In 2025, FIS launched its next-generation enterprise treasury platform, Treasury and Risk Manager — Quantum Cloud Edition with advanced features for liquidity management, debt and investment tracking, and hedge accounting. This cloud-native solution can support increased workloads, larger transaction volumes, and increased enterprise connectivity, scaling these capabilities to provide CFOs and corporate treasurers with greater visibility of risks, improved data-driven decision-making, and faster, more efficient money movement.

FIS recently introduced Treasury GPT, an AI-driven product support tool integrated with its treasury platforms. This tool aims to reduce administrative tasks, allowing treasury professionals to focus more on strategic activities such as liquidity management and risk assessment.

Treasury GPT is designed to autonomously interpret user queries, access relevant documentation, and deliver tailored responses, thereby supporting decision-making within treasury operations.

The introduction of Treasury GPT reflects FIS' commitment to integrating advanced technologies into its treasury solutions, with the objective of improving efficiency, reducing costs, and aiding strategic financial management.

Challenges

- **Legacy client environments and data fragmentation:** FIS serves a broad base of large enterprises and financial institutions, many of which operate with legacy systems. Integrating AI requires access to clean, structured, and centralized data, yet many organizations maintain siloed data across outdated ERP, banking, and treasury systems.

  Implication: This can limit AI's effectiveness in providing accurate insights or performing tasks autonomously.

- **Lack of feature/function and scalability to drive value of AI:** AI relies on access to data. Legacy cloud or SaaS infrastructures may lack the scalability necessary to support meaningful AI outcomes. To maximize the potential of AI, two important components must be in place — scalability to handle large data volumes, and features and functions capable of performing the required calculations. Both elements are needed to enable AI to effectively deliver value.

  Implication: Inconsistent and incomplete data can limit AI efficacy, potentially reducing user trust and the value derived from automation features.

- **Client trust and regulatory risk:** Treasury functions are highly risk sensitive and operate under stringent compliance standards (e.g., SOX, IFRS, and EMIR). The introduction of autonomous or semiautonomous decision-making tools raises important considerations regarding accountability, auditability, and explainability, particularly when AI-driven actions impact liquidity or risk positions.

  Implication: To encourage adoption among conservative treasury teams, FIS must invest heavily in AI transparency, human-in-the-loop controls, and robust governance frameworks.

Conclusion

Today's treasury faces immense challenges from surging data and uncertainty. Traditional monolithic infrastructures impede agility and strategic response. To help prepare for the future, CFOs must embrace a modern, resilient, and agile cloud-native infrastructure. Treasuries and IT are encouraged to look behind the scenes of cloud and SaaS to understand limitations. Cloud or SaaS in isolation no longer translates to modern infrastructure.

The linchpin of this evolution lies in the strategic modernization of treasury data infrastructure.

Consequently, it is increasingly important to leverage the public cloud for improved scalability, microservices to help increase modularity and continuous innovation, containerization for more consistent deployments, and advanced APIs for rapid data integration. Modernization is a strategic imperative that can help transform treasury from reactive to proactive. Adopting these principles and investing in cloud-native treasury software can enhance visibility, operational efficiency, scalability, risk management, and cost optimization. It also is the underpinning for leveraging innovative technologies like AI and robotics to help make treasury a dynamic strategic asset, capable of helping drive companywide financial success.

About the Analyst

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As a research director with IDC's enterprise applications team, Kevin Permenter provides insights and intelligence across multiple areas, including ERP, order management, financial applications, project management, and portfolio management. Kevin assesses the interplay, challenges, and trends regarding various enterprise application deployment models, including mobile enterprise applications and cloud models, and develops and delivers his views, opinions, and analysis on the dynamics and evolution of this complex technology ecosystem.

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