Necto

Premium Banking APIs

The foundations for the future of
treasury bank connectivity

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APIs: Critical Tech Infrastructure for the Intelligent Enterprise

This white paper delves into the innovative world of premium banking APIs for corporate treasury, providing a comprehensive analysis of their role in transforming corporate treasury management. We will explore how these APIs not only address current challenges in cash management and payments but also how they pave the way for more efficient, secure, and forward-looking financial operations.

Application Programming Interfaces (APIs) are rapidly emerging as a transformative technology in the corporate treasury landscape. Spurred by the PSD2 directive in Europe, banks have recognized the imperative to leverage APIs for offering enhanced services to their corporate clients. This realization has given birth to premium banking API services, designed to offer frictionless bank connectivity. These bank API services are specifically tailored to address the most pressing pain points experienced by corporate treasurers.

In the aftermath of the Covid-19 pandemic, cash and liquidity management has solidified its position as the top-ranked priority for treasurers worldwide. The volatility of markets and prevailing uncertainty have highlighted the critical need for a technology-driven approach in treasury functions, especially in the realm of cash management.

Treasurers have traditionally been constrained by the challenges of making pivotal decisions based on outdated data, limited visibility of cash positions, and the use of disjointed systems.

Premium banking APIs are a game-changer for treasuries, catalyzing a shift from relying on the previous day's bank statements to achieving real-time visibility of their cash positions. These advanced APIs facilitate instant payments and provide a level of payment tracking detail that was unattainable with traditional connectivity methods. Deloitte's latest Global Treasury Survey encapsulates this evolution, stating, "API technology currently has the most concrete use for treasury departments... API provides additional means for treasury to connect to their banks and turn a 'prior day' view of cash into real-time or on demand." [1]

While the value proposition of premium banking APIs in transforming corporate treasury bank connectivity is undeniable, the integration of these APIs into existing treasury, finance, and payment systems is equally crucial. This integration represents a pivotal step in fully harnessing the potential of APIs, ensuring that treasuries can operate with enhanced efficiency, accuracy, and strategic foresight.

In the ensuing sections, we explore the intricate landscape of bank connectivity challenges that today's treasurers face, unravelling the complexities and pinpointing the obstacles that impede efficient treasury and finance operations. We will then consider how premium banking APIs emerges as the technology of choice to address these challenges.

Specifically, we spotlight the unique value proposition of Necto's premium banking API aggregator - a tool designed not just to meet, but to exceed the demands of advanced treasury, finance, and payments management.

As we progress, we will navigate through treasury use cases, demonstrating the tangible impact and transformative potential of Necto's solution. This journey culminates in an insightful exploration of Necto's deployment and support strategy, which has been crafted to ensure the seamless integration of premium banking APIs into any finance system. Join us as we chart this path, demonstrating how Necto not only simplifies the complex world of corporate bank connectivity but also redefines it.

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A Treasurer's Bank Connectivity Pain Points

As we navigate the ever-evolving landscape of treasury, finance, and payments, it's imperative to scrutinize the intricacies and challenges that come with traditional bank connectivity methods. This not only sheds light on the complexities treasurers face daily but also sets the stage for understanding the pressing need for more agile and efficient solutions. In the following sections, we'll dissect the multi-faceted challenges of existing bank connectivity channels - from the web of complex integrations to the necessity of extensive technical support and the prolonged timelines of integration projects, all culminating in a scenario were treasurers grapple with outdated cash management systems. This exploration is crucial for appreciating the transformative impact of next-generation technologies, particularly APIs, in redefining the treasury landscape.

Multiple Complex Integrations

Bank connectivity has seen significant evolution since the inception of the Swift network in 1970. Despite the availability of various bank connectivity channels like Swift, Host-to-Host, Bank portals, EBICs, and 3rd party middleware, treasurers face the challenge of navigating through these complex systems.

This complexity is not just about choosing the right channel, but also about managing and maintaining the multiple integrations with different banks, a task that has become increasingly demanding in the era of big data and cloud computing.

Lengthy Bank Integration Projects

After a treasurer selects a connectivity channel that appears to fit their needs, they are then faced with lengthy integration projects. The time required to fully implement a chosen channel can extend from weeks to months, and for larger treasuries, year-long rollout plans are common. This lengthy process makes simple multi-bank connectivity, a key to flexibility and digital transformation, difficult to achieve.

Extensive Time-Consuming Support

Implementing and maintaining these connectivity channels often requires large technical support teams, both during the initial phase and for ongoing maintenance. This necessity places a burden on treasurers, who find themselves competing for IT resources within their organizations. A recent AFP Real-Time Payments Survey Report sights "system development issues" as the foremost barrier to adoption real-time payment methods, by 64% of treasurers surveyed.[2]

Result: Outdated Cash Management

The practical outcome of these challenges is that treasurers are frequently left with outdated cash management data. The complexities and delays inherent in traditional bank connectivity methods render real-time visibility of cash positions nearly impossible, severely hindering essential decision-making processes. Treasurers who hesitate to adopt API technology are at risk of falling behind their peers who are embracing the advantages of next-generation technology, thus facing a significant competitive disadvantage.

Bank Connectivity Through the Eras

1970s-80s
Emergence of SWIFT

SWIFT was established to standardize and secure cross-border financial transactions, replacing Telex. It was revolutionary for its time, introducing a new level of standardization and security in global banking communications.

With the rise of computer technology and digital communications, H2H systems emerged. These allowed businesses to directly connect their internal systems (like ERP) with bank systems, offering more control and potentially more efficient processes than manual methods.

1980s-90s
Advent of H2H systems

Late 1990s-2000s
Rise of Bank Portals

The internet revolution led to the development of online banking portals. These offered more user-friendly interfaces and greater accessibility for daily financial operations. However, they often lacked the sophistication and integration capabilities needed for complex treasury functions.

2010s - Present
The API Revolution

APIs represent the latest evolution in financial technology, driven by the need for real-time data, system interoperability, and the democratization of financial services.

Feature	Necto APIs	Premium Banking APIs (without Necto)	SWIFT	Host-to-Host (H2)	Bank Portals
Real-Time Processing	✓	✓	✗	✗	Limited
Easy System Integration	✓	✗	✗	✗	Limited
Ease of Multi-bank Connectivity	✓	✗	✓	✗	✗
Standardization	✓	✗	✓	✗	✗
Cost-Effectiveness	✓	✓	✗	✗	✓
Scalability	✓	✓	✓	Limited	✓
Transaction Speed	✓	✓	✗	Varies	Varies
Flexibility	✓	✓	✗	Limited	✗
Ease of Use	✓	✓	✗	✗	✓

Table 1: Necto APIs comparative analysis

Multi-Bank API Aggregation Needed

As shown in the Table 1, SWIFT, H2H and Bank Portals are quickly becoming expensive legacy technologies, with bank APIs providing the way forward to embrace the next digital revolution. Whilst premium banking APIs serve the purpose of getting a treasury ready for the next wave of technology innovation, standardization of API specifications across banks tends to be lacking.

The integration of each bank's API specification requires IT engineering resourcing, which may result in a lengthy project implementation roadmap to even get treasury up and running with APIs. In addition, highly sought-after multi-bank API connectivity is difficult to achieve through a single bank.

APIs are foundational to the future of Treasury

Heading into the next decade, emerging technologies such as generative AI and quantum machine learning will compel enterprises to thoroughly reconsider their core technology infrastructure. Quantum machine learning will provide the ability to carry out cash forecasting with steely accuracy, based on multi-variate analysis, and training on a smaller data set. AI and Machine Learning are only as good as the data with which models are trained and draw inference from, this is where the power of Necto APIs can be fully realized. In the next section, we will explore how Necto APIs are the foundation for quality data, which will be much needed to leverage emerging technologies.
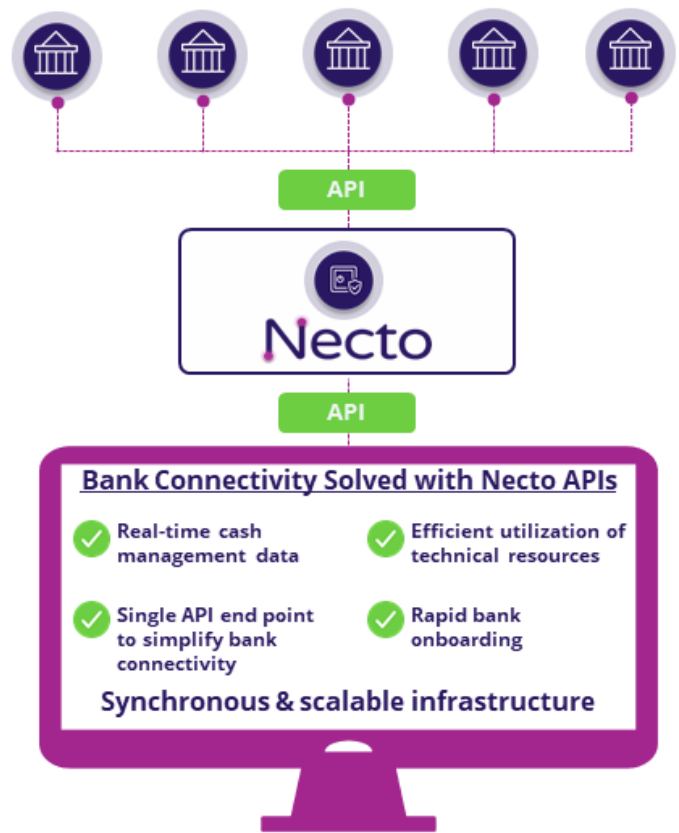
Introducing Necto

Adapting to the rapidly evolving landscape of financial technology demands a paradigm shift in bank connectivity for treasury optimization. Necto was created to empower treasuries with the tools necessary for harnessing next-generation banking technologies. Offering unparalleled API bank connectivity, Necto connects treasuries to leading global financial institutions through a single, frictionless integration.

Integration of Necto into any system paves the way for seamless, real-time treasury and finance operations. The traditional bank connectivity challenges and complexities once synonymous with corporate treasury bank connectivity are effectively addressed with Necto's premium banking APIs. This marks a significant leap forward, positioning treasuries at the forefront of digital financial management and operational efficiency.

The Bank Connectivity API Paradigm Shift

Bank Connectivity Pain Points

- ❌ Outdated cash management data
- ❌ Large technical support team needed
- ❌ Multiple complex integrations with banks
- ❌ Lengthy customer onboarding implementations

Less-than-ideal connectivity experience

Bank Connectivity Solved with Necto APIs

- ✅ Real-time cash management data
- ✅ Efficient utilization of technical resources
- ✅ Single API end point to simplify bank connectivity
- ✅ Rapid bank onboarding

Synchronous & scalable infrastructure

"Necto gave us the ability to provide real time liquidity management to our corporate customers," says Frederic Saunier, General Manager of Diapason

Necto's Unified Gateway Transforms Bank Connectivity

Universal Bank Connectivity

Necto offers a singular gateway, enabling seamless connectivity to global banks and financial institutions via a harmonized API specification. This serves to streamline treasury and finance operations by allowing the retirement of multiple, redundant integrations. Real-time data and function integration are made possible directly within treasury and finance platforms.

Enhanced Security for API Credentials

Necto has developed an intuitive user interface for the secure storage and management of bank API credentials, certificates, and keys. This critical feature ensures that banking connections are secure, providing peace of mind in an era where digital security is paramount.

Elimination of File Manipulation Concerns

All payments processed through Necto's system utilize API channels secured with bank-level credentials, rendering payment messages tamper-proof. This level of security ensures the integrity of every transaction executed.

Flexible Deployment Options

Necto accommodates different business needs by offering both on-premise and cloud-based deployment options.

Optimized Cash and Liquidity Management

Enriched bank account balances and transaction reporting in real-time are possible with Necto APIs. This feature facilitates iterative reconciliation throughout the day and supports instant payments with synchronous settlements. Necto also offers cut-off free payment rails for 24x7 high-value payments and provides instant status updates on payment messages.

Efficient Utilization of Technical Resources

Choosing to integrate Necto APIs reduces the need for manual integration of each bank's API services by software engineers. This efficiency frees up crucial resources, allowing them to focus on other vital projects.

Rapid Onboarding for Businesses

Necto's APIs significantly reduce the time required for onboarding, allowing businesses to quickly benefit from API technology. The Necto Customer Success framework is designed to deliver fast time-to-value for investments in API technology, facilitating swift adaptation and evolution in financial operations.

Necto Use Cases for Optimized Cash Management

Payment Initiation API

Initiate payments with precision and speed, bypassing the need for manual processes or bank portals

Account Balances API

Access up-to-the-minute account balances, offering a panoramic view of your financial standing

Payment Status Tracking API

Gone are the days of ambiguous payment statuses. With real-time tracking, you gain clarity on every transaction's journey

Account Transactions API

Stay informed with a comprehensive log of all account activities, aiding in reconciliation & fraud detection

Payment Lifecycle Management

The realm of business-to-business payments is undergoing a significant transformation. Recent insights from the 2023 AFP Real-Time Payments Survey Report reveals a striking trend: 98 percent of surveyed organizations, each with annual revenues ranging from $1 billion to $9.9 billion, expect to embrace real-time payment systems within the next five years.[2]

Organizations adopting a progressive stance in their treasury and finance platforms will recognize APIs as fundamental enablers of real-time payments. Necto's payment initiation APIs, both pre-built and rigorously pre-tested, streamline the adoption and integration process of premium banking APIs within treasury and finance systems.

Through Necto's API aggregator, BankLync, API request messages facilitate the transmission of payment instructions directly to banking partners. This integration ensures that the existing payment approval process, configured in the treasury or finance system, including payment signatories and authorizations, remains intact and uninterrupted.

Once the payment information is securely relayed to the banking partner, Necto's payment status API offers a transparent view of the entire payment journey. With the integration of Necto's payment status API, treasury and finance systems gain the ability to display real-time payment status tracking, ensuring visibility until the payment reaches its beneficiary. Furthermore, in instances of payment processing exceptions, users can promptly engage with their banking partners for resolution, thereby reducing issues in payment reconciliation and enhancing cash forecasting accuracy.

Cash Position, Near-Term Forecasting & Reconciliation

Banks have long enabled their consumer banking customers to access and view real-time bank balances through mobile device apps. Now, premium banking APIs extend this innovation to treasury dashboards, offering real-time account balances and transaction data. This advancement significantly enhances daily operational cash positioning and is pivotal for critical decision-making.

In previous decades, treasurers often found themselves constrained by the limitations of waiting for the previous day's bank statements. This delay meant analyzing and reporting on cash positions that were already outdated. Moreover, depending on the sophistication of their treasury, finance, and payment systems, they frequently had to undertake additional manual steps to assemble an approximation of the cash position, which often lacked accuracy.

Necto APIs revolutionize this process by aggregating account balances and transaction APIs from multiple banks. This aggregation exposes the richness of real-time cash data through a single integration, drastically enhancing the accuracy and immediacy of financial information. As a result, daily cash operations, including cash pooling, concentration, and forecasting, are empowered with up-to-the-minute data, driving superior decision-making across the treasury and finance function.

When contemplating the integration of premium banking APIs, a practical starting point for businesses could be the balances and transactions reporting APIs. Demonstrating the tangible benefits of cash reporting APIs can create momentum for further investment in payment initiation APIs, thereby progressively enhancing the treasury, finance, and payments management ecosystem.

Bank Securely with Necto's APIs

Enterprises face a multitude of cyber security risks, from data breaches and leaks, to phishing attacks and social engineering, it has never been more important to fortify highly sensitive financial data with the best security protocols.

Necto's stateless API aggregator facilitates direct connectivity to banking partners and financial institutions. The connectivity is secured through API credentials exchanged directly between the bank and the corporate, during the course of API onboarding. Since each bank has its own set of security protocols, managing the security requirements of each bank can become a complex task for a corporate's IT team. Necto's product solves this problem by offering a user-friendly, highly secure configuration tool where security credentials can be stored and maintained for all banking partners.

Necto supports all API security protocols required by banks and financial institutions for access to their premium banking APIs. Necto acts as a networking layer between systems, and does not store or own customer banking data.

End-to-End Encryption

API communications are secured using end-to-end encryption, typically through protocols like HTTPS, which incorporate SSL/TLS encryption. This ensures that data transmitted between the enterprise and the bank is encrypted during transit, protecting it from interception or unauthorized access.

Strong Authentication Protocols

APIs utilize robust authentication mechanisms, such as OAuth. These protocols provide secure access tokens and authenticate both the client and the server, ensuring that only authorized applications and users can access the banking data. This significantly reduces the risk of unauthorized access and potential data breaches.

PGP Keys for Data-at-Rest Security

PGP (Pretty Good Privacy) keys provide an additional layer of security for data at rest. When banking data is stored, PGP can be used to encrypt this data, ensuring that even if unauthorized access to storage systems occurs, the data remains unreadable without the appropriate PGP decryption keys.

Necto's Framework for Delivering Success

Integrate

Integrate once to a single JSON rest API standard

Customers enjoy the benefits of premium APIs in their native product

Onboard

Rapid onboarding and go-live with premium treasury APIs

Improved treasury management experience within weeks

Support

Dedicated Necto Help Center for support & product knowledge

Global support coverage across APAC, EMEA and North America

Scale

Enjoy immediate access to a growing portfolio of connected institutions

Continuous product improvements and updates to API services

Necto's Customer Success framework is designed to expedite the adoption of its API offerings. This journey begins with access to the comprehensive Necto developer portal, which offers software engineers round-the-clock access to Necto's API services. These services are integral for seamless integration into treasury and finance systems. Thanks to the framework's focus on rapid onboarding, users can experience an enhanced treasury operation within just a few weeks.

Furthermore, customers benefit from Necto's continuously expanding network of connected banks and financial institutions.

The entire customer experience is supported by the robust Necto Help Center. This web-based platform allows customers to submit support requests and access a wealth of resources, including product release notes and guides. In alignment with its commitment to exceptional service, Necto employs a 'follow the sun' support model, ensuring comprehensive global support coverage across regions including APAC, EMEA, and North America.

# Welcome to the Necto Help Center
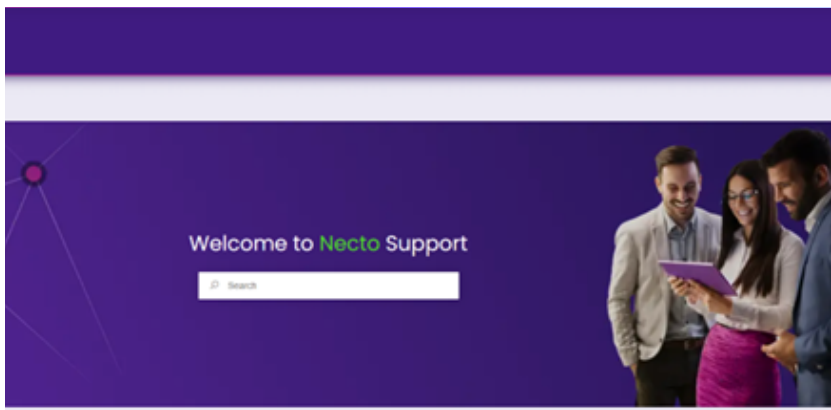
Necto 24x7 Support Portal

In the Support Center Portal, a range of topics awaits Necto users, encompassing production support, implementation queries, billing, and licensing issues. This section is designed to guide users efficiently to the appropriate solutions for their support needs.

Requests Tracker

The 'My Requests' feature offers users the ability to track the status of their support inquiries. This function ensures users are consistently updated and informed about the progress and resolutions of their raised support issues.
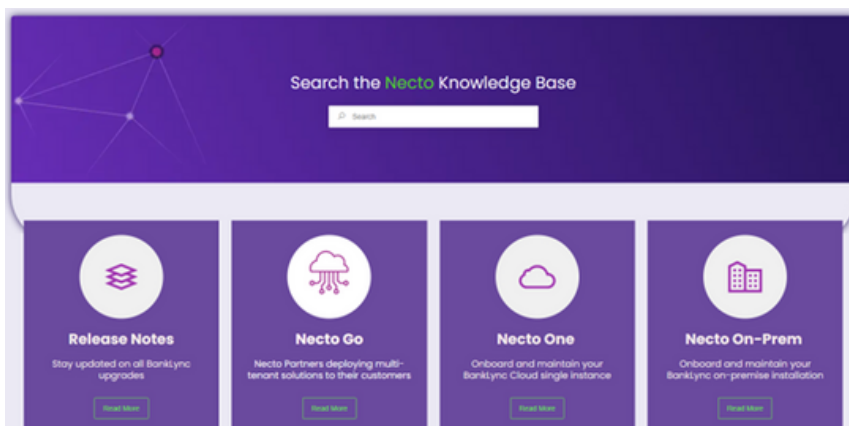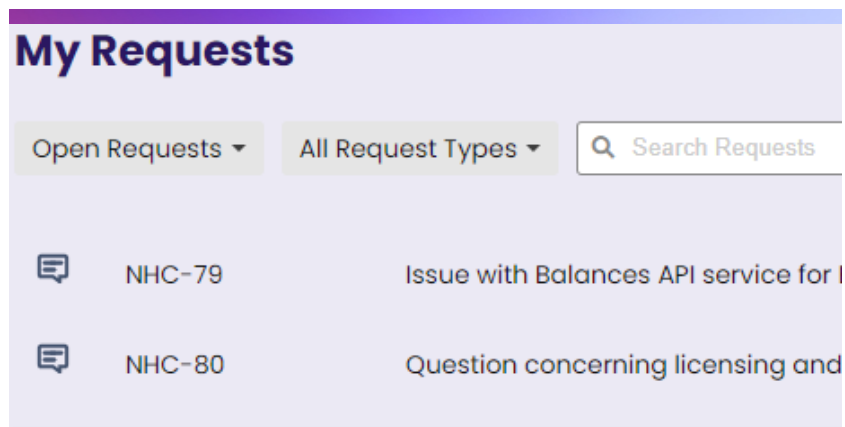
Self-service Knowledge Base

The Knowledge Base presents an array of informative articles accessible through interactive topic cards. These resources delve into various aspects such as recent release notes and detailed guides on multi-tenant partner deployments and on-premises solutions, offering users comprehensive insights into getting Necto's product up and running.
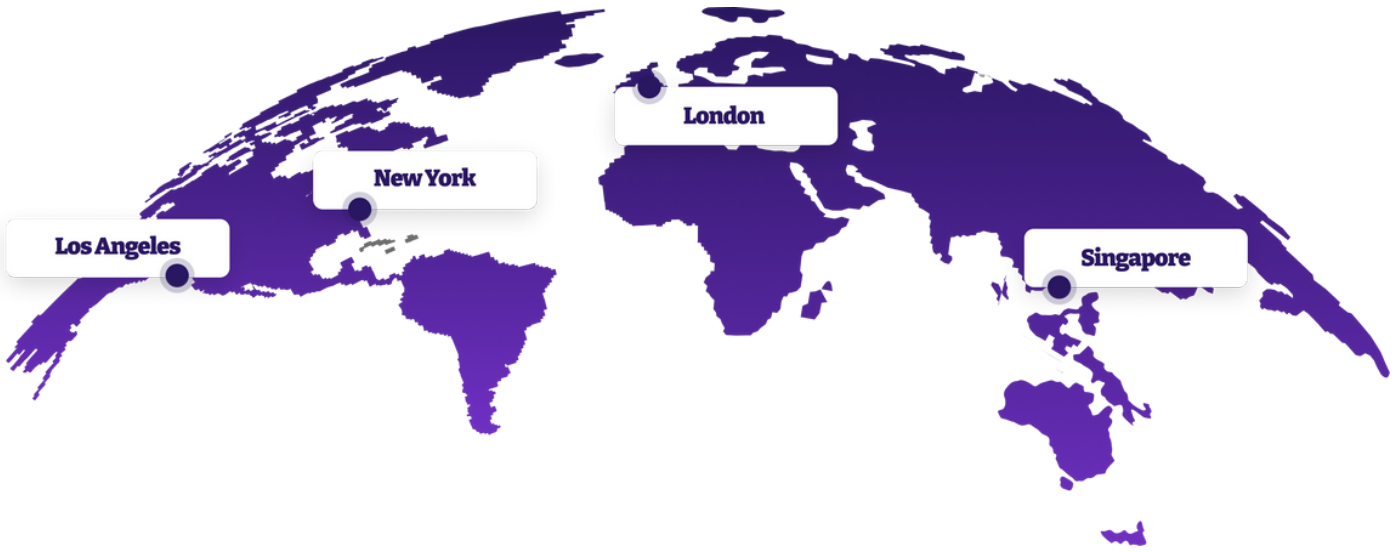
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End Notes

1. Deloitte. (2022). Deloitte Global Corporate Treasury Survey. Deloitte Global Treasury Survey, November 2022.
2. Association for Financial Professionals. (2023). 2023 AFP® Real-time Payments Survey Report. Sponsored by The Clearing House (TCH).