

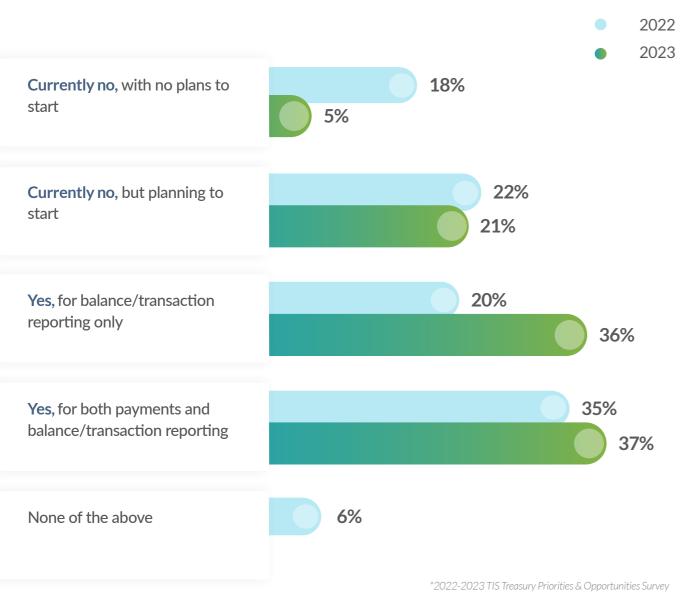
The Pros & Cons of Bank APIs in Treasury & How TIS Supports Them

In 2023, interest in bank APIs by treasury and finance teams as an option for streamlining their payments and reporting functions is at all-time highs.

According to data from TIS' 2023 Treasury Priorities & Opportunities survey, 73% of U.S. practitioners expected to leverage bank APIs in some capacity for either payments or transaction reporting during the next year. Compared data from 2022, these numbers represent an 18% increase in expected bank API usage within just a years' time.

When also examining recent survey data from prominent research bodies like AFP and Strategic Treasurer, we can see that the adoption of bank APIs by treasury has been trending steadily upwards for almost a decade now.

But what exactly is behind this widespread growth?



LEVERAGING APIs TO COMMUNICATE WITH BANKS: 2022 vs 2023

WHY BANK APIS ARE GAINING MOMENTUM IN THE TREASURY ENVIRONMENT

In large part, bank APIs are enhancing the way treasurers handle payments and reporting because they allow organizations to directly connect their back-office systems with their banks to enable faster, more efficient, and more secure financial transactions. Today, some of the more prominent benefits associated with their use are highlighted below.

Increased Automation of Payments & Reporting:

One of the key benefits of bank APIs is their ability to automate many of the tedious and time-consuming tasks that are traditionally associated with treasury's payments and reporting operations via SFTP or e-banking portals. For example, using an API, treasury can automatically send and receive payments, reconcile bank statements, and generate reports on financial transactions in real-time. This eliminates the need for manual data entry, reduces the risk of errors, and increases the speed and accuracy of financial reporting.

Streamlined Integration & Connectivity:

Bank APIs also make it possible for treasury to access a wide range of financial services through a single interface. For instance, organizations can use bank APIs to access multiple bank accounts, make payments in multiple currencies, and even access investment and lending services. This can greatly simplify the connectivity workflows that comprise treasury's technology landscape, making it easier to manage their finances, gain visibility into cashflow, and make strategic decisions. It can also help eliminate reliance on legacy bank portals or SFTP connections.

Real-Time Visibility & Strategic Insight:

Bank APIs allow treasurers to gain real-time visibility into their financial transactions, which is particularly important for managing cash flow and liquidity. With real-time access to account balances and transaction data, practitioners can make more informed decisions about when to make payments and when to hold onto their cash. This can help them to optimize their cash management strategies and reduce the risk of running out of cash or missing important payment deadlines.

Enhanced Security Components:

Another benefit of bank APIs is the increased security they provide. By connecting directly to a bank's systems, treasury teams can ensure that their financial transactions are being processed securely, without the need to rely on third-party providers. Additionally, bank APIs typically use advanced security protocols, such as tokenization and encryption, to further protect against fraud and data breaches.



POTENTIAL DRAWBACKS OF USING BANK APIs

While bank APIs offer many benefits to treasury teams, there are also potential challenges to consider. Some of these potential challenges include:

1. Integration Issues:

Ensuring that the API integration with each bank is seamless and that there are no disruptions to the workflows of existing systems can be a challenge. Organizations also need to ensure that their systems are properly configured to work with the bank's API, which can be a complex and time-consuming process. This is especially the case for treasury teams that are attempting to integrate numerous bank APIs that may not be standardized with one another and therefore must be configured and tested separately.

2. Lack of Technical Expertise:

Organizations need to have the necessary technical expertise to properly use and maintain the API, which can be a significant investment. This includes the need for specialized personnel who are familiar with the specific API and can troubleshoot any issues that may arise. For teams without technical expertise and that also lack the proper support from their banks or internal IT team, these issues can escalate fast.

3. Limited Coverage:

Although efforts by banks to build robust APIs are progressing, not all banks provide APIs today. Furthermore, those that do still may not provide access to all the functionalities or services that treasury requires for both payments and reporting. In some cases, the API may only work for payments or reporting, or even just for specific types of payments and reports. This may ultimately limit the efficiency and use cases for treasury relative to other connectivity options.

4. Excessive Cost:

Implementing and maintaining bank APIs can be costly, as it may require significant investments in hardware, software, and personnel. Because the bank API landscape is still largely unstandardized and many bank APIs are developed and issued using unique configurations, treasury teams that are looking to implement APIs across numerous bank relationships may face excessive costs and timelines for configuring all required functionalities. And on an ongoing basis, the effort required to maintain each API can also be a source of strain.

5. Compliance & Security Gaps:

Bank APIs may require compliance with various regulations, such as data protection and anti-money laundering laws, which can be a significant challenge for corporations. Similarly, while bank APIs typically use advanced security protocols such as tokenization and encryption, treasury groups still need to ensure that their systems are properly configured and that their employees are trained to handle sensitive financial information securely.

KEY CHALLENGES OF LEVERAGING BANK APIs



Integration Challenges with the Back-Office



Limited Market Coverage for Full-Service APIs



Confusion on Compliance & Security Coverage



Lack of Internal Technical Expertise



Excessive Costs to Ensure Global Coverage



Integrating APIs While Keeping Compatibility With Other Options

HOW TIS SUPPORTS BANK APIS ALONGSIDE NUMEROUS OTHER CONNECTIVITY OPTIONS

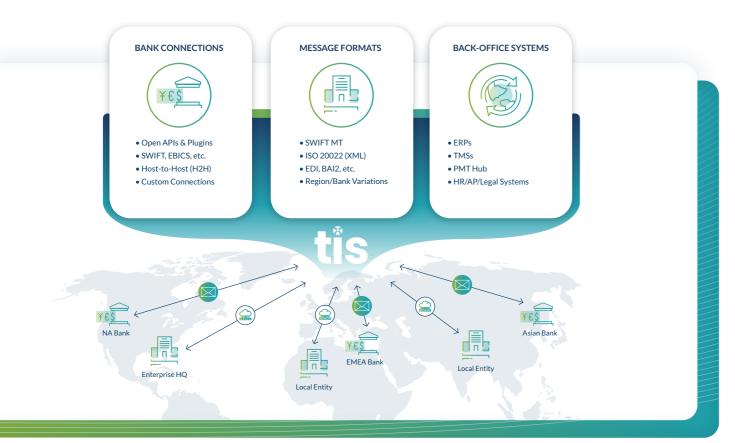
In TIS' experience, APIs are proving to be an innovative and beneficial alternative to legacy connectivity options. However, because the current banking environment often requires treasury to maintain compatibility with numerous connectivity networks and protocols and because the API landscape is still rapidly evolving, practitioners should work to adopt treasury technology that can support a broad range of channels, formats, and standards.

For instance, a global treasury group operating in numerous countries today would likely be expected to maintain a variety of SWIFT, EBICS, H2H (SFTP) and API connections depending on their technology structure in each region and relationship with each bank partner. Likewise, a global treasury group would also probably need to maintain compatibility with many different messaging standards and formats including ISO 20022, SWIFT MT, EDI, BAI, and even bank-specific or proprietary formats.

However, because developing and maintaining this level of standardization and compatibility can become complex and time-consuming, it is highly recommended that organizations rely on a specialist to simplify these workflows for them. Today, this is exactly what TIS is providing through our award-winning SaaS-based platform.

For over a decade, TIS has specialized in connecting treasury's back-office systems – including ERPs and TMSs as well as AP, HR, and payroll platforms -- with their global banks via SWIFT, SFTP, EBICS, API, and more. To accomplish this, we've developed one of the most comprehensive bank format libraries in the world and are proud to offer payments and reporting services across 140 currencies, 175 countries, and via almost any payment option including wires, checks, ACH / SEPA, and cards. This includes connectivity to more than 11,000 banks globally, as well as a complete suite of financial messaging and bank statement management services for SWIFT MT, ISO 20022, and regional or bank-specific standards. Finally, our in-house experts manage the vast majority of connectivity configuration, maintenance, and upkeep on behalf of our clients, which drastically reduces the burden on their treasury and IT teams.

As a result of these solutions and services, TIS clients find that they can easily manage banking through virtually any method or standard required globally, including APIs. More about our API-specific services and the scope of coverage we offer is provided in the following section.



BY THE NUMBERS: TIS GLOBAL BANK API COVERAGE IN 2023

In 2023, TIS provides several different options to clients for leveraging bank APIs. These options include open API connections that are configured directly with the bank, as well as EBICS-enabled APIs that can be leveraged as part of a "network" effect. These options are elaborated upon in more detail below, based on data concerning the top 25 banks globally (ranked by annual B2B transaction volume from TIS clients).

25 TOP GLOBAL BANKS

are all connected to TIS via either API, SFTP, EBICS, or SWIFT connectivity.



EBICS API Connections

21 out of 25 Banks

are connected to TIS via API through the EBICS network.

- These 21 banks support the EBICS HTTP API, based on XML data as opposed to JSON. Currently, the broad acceptance and use of EBICS-enabled APIs is a primary reason for the slow adoption of Open APIs by treasury groups within the DACH region.
- For the foreseeable future, TIS plans to continue supporting EBICS API connectivity in all circumstances for use by our clients.

Open API Connections

24 out of 25 Banks

have developed Open APIs for account balances, payments, and real time payments. Most of these banks have implemented a hybrid approach to APIs, meaning that some operate with realtime information, while others operate on the existing pain 001/002 and camt 052/053 schema for intraday / same-day functionality.

17 out of 25 Banks

are to be connected within the next 12-24 months to address new use cases when it comes to embedded finance, for example:

- Querying real-time account balances
- Initiating single-line real-time payments for liquidity purposes

• Receiving real-time push notifications for payment collections which will release a product/service to a customer

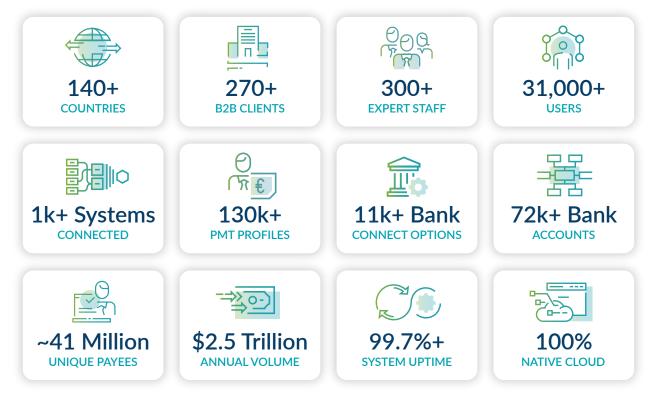
• Automating cyclical or routine direct debit payments so that a customer does not need to submit a new request for recurring payments every month

8 out of 25 Banks

are currently connected to the TIS platform via Open PSD2/Premium APIs

FOR MORE INFORMATION

To learn more about TIS' compatibility with bank APIs or to review our complete list of connectivity options and format / standard support globally, we encourage you to contact our team at **info@tispayments.com** or visit our **website** to schedule a meeting with our experts!



*Statistics are representative of operations as of Q1 2023, unless otherwise noted.

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